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Proceedings  
OF THE  
THIRTY-EIGHTH ANNUAL  
CONVENTION  
OF THE  
Association of  
Colleges and Secondary  
Schools  
of the Middle States and  
Maryland

**1924**

HELD UNDER THE AUSPICES OF THE  
COLLEGES and SCHOOLS  
OF WASHINGTON, D. C.

FRIDAY AND SATURDAY  
NOVEMBER 28 and 29, 1924

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PUBLISHED BY THE ASSOCIATION

1925

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## NOTICE

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Extra copies of the *Proceedings of the Association* may be secured without charge from the Secretary by any officer of a College or School holding membership in the Association.

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The next Convention of the Association will be held at New York City, under the auspices of Columbia University, on the Friday and Saturday following Thanksgiving, 1925.

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## CONTENTS

	PAGE
List of Officers.....	4
Commissions under the Auspices of the Association.....	5
Addresses of Welcome:	
<i>U. S. Commissioner of Education</i> .....	7
<i>President of George Washington University</i> .....	9
Response:	
<i>President of the Association</i> .....	12
General Topic—"Progressive Education in Its Relation to the Better Preparation of College Entrance Candidates."	
(a)—What Secondary School Subjects Are Really Fundamental in Preparation for College Work?	
<i>Headmaster Wilson Farrand</i> .....	14
Discussion .....	23
(b)—Wanted: A New Spirit in Science Teaching.	
<i>Dr. Otis W. Caldwell</i> .....	30
Discussion .....	38
List of Temporary Committees .....	43
Greetings:	
<i>President R. A. Blackwell, Association of Colleges and Secondary Schools of the Southern States</i> .....	43
General Topic—"What the College Expects of Its Freshmen"	
(a)—The Use of General Intelligence Tests in College	
<i>Dean Herbert E. Hawkes</i> .....	46
Discussion— <i>Dean Howard McClenahan</i> .....	54
General Discussion .....	55
(b)—The Freshman: Course of Study, Teachers, and General Guidance	
<i>Dean C. Mildred Thompson</i> .....	56
<i>Acting Dean Percy T. Walden</i> .....	61
Discussion .....	67
Business Meeting:	
Report of the Treasurer .....	68
Report of the Auditing Committee .....	69
Report of the Executive Committee .....	69
Report of the Commission on Higher Institutions .....	70
Report of the Commission on Secondary Schools .....	71
Report of the Committee on Entrance Credits in Public Speaking	71
New Business .....	74
Appointments .....	75
List of Members .....	76
List of Delegates Registered .....	83

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## FRIDAY MORNING SESSION

November 28, 1924

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### ADDRESSES OF WELCOME

HON. JOHN J. TIGERT, United States Commissioner of Education

*Mr. President and Members of the Association of Colleges and Preparatory Schools:*

We are happy to have you in Washington, and I am sure that you are happy to be here. It is a great privilege always to welcome a group of this kind. I sometimes feel, however, that in these days those who come feel themselves more fortunate when those who make the addresses of welcome do not appear; because such addresses have become so much cut and dried, and frequently people get tired of hearing of the exploits and the history, and the accomplishments of those among whom they meet.

Fortunately, Washington is like Webster's Massachusetts—it requires no encomiums. And even if it required encomiums, there is no one who can really do it justice; and so I am glad that I do not have to undertake that today.

You all know Washington. If you don't know it, you will know it very shortly. I want to say, however, because in Washington people are not always given the same degree of personal attention that they are given sometimes in, I might say, less provincial places, you must not think that in Washington we are not cordial and hospitable and generous and glad to have you here. I sometimes say that to me Washington is the most blasé place in the world; there are so many prominent personages, including even kings and princes—especially among the better known princes—who come here that the ordinary man does not always receive the personal attention that sometimes is expected. But we want you to know that we are personally interested in the meeting, we are personally interested in each and every one of you, and I am sure that I speak not only for the officials of Washington, but particularly for the educational interests of Washington, when I say that we are very happy to have this great organization in our midst.

We have here a large number of educational institutions. We have institutions of higher learning which go back to the time of George Washington himself; and we have maintained an educa-

tional atmosphere here in the capital which has meant much to the life of our city. But we feel that it is a great benefit to Washington to have educational gatherings coming here from time to time, particularly in this time when our whole educational world, as well as the political world and some other worlds, is in a state of fermentation. We are sure that, when you gather at this time, you have before you a program of great importance and significance, and we hope that you will be successful in studying and working out solutions to some of these many problems that are now confronting you.

The great progress that has been made in science and other realms in these last years has placed upon us a great demand for revolution and evolution. I think it was some great scientist who said that he took all the science books in his library which were ten years old and threw them out. I think the time has come that the scientific work that is two or three years old is ready to be thrown out. With these remarkable advances that are being made in science, in reorganization of our whole curriculum, particularly the secondary curriculum, and the many questions that are being brought up with reference to the objectives of education today, it seems to me that there is no type of gathering which is better calculated to advance education and the interests of education than this one, particularly if you are not disturbed and your work trespassed upon by those who just simply want to speak.

So I am not going to make any address this morning. The president, in giving his very cordial invitation, was kind enough to indicate that we would not be required to make an address, would not be required to speak a long time, and he intimated that ten minutes would be enough. I am going to make mine in five minutes. You will have an opportunity, however, to hear another address of welcome. I want to say before I sit down that if we can be of any service to you in the Bureau of Education, we shall be very glad to do anything that we can. You will not find us, however, in the old quarters down in the Pension Building; you will find us in new quarters in the Interior Building, and we hope you will take time to come up and see the specialists in whose work you are interested, and we will undertake to render any service that we can possibly render. And I am sure that, as you go around Washington, while you are here these few days, you will have somewhat of the inspiration and the feeling of the

negro soldier over in France when there was a discussion about the relative merits of the buglers of two different companies. One of these negro soldiers said, "I wish you could hear our bugler. Whenever our bugler plays payday, it sounds to me like the Boston Symphony Orchestra playing The Rosary." "Well," the other negro said, "that ain't no music at all. I wish you could hear our bugler. Why, when Snowball Johnson wraps his lips around that bugle and plays mess call, then I just look into my beans, and I says, 'strawberries, behave, you is kicking all the whipped cream out of the dish.'" I hope that is the way you will feel here in your meeting in Washington. I thank you.

PRESIDENT W. M. LEWIS, George Washington University  
*Mr. President, Ladies and Gentlemen:*

The commissioner of education has referred to the time limit which was set upon these introductory addresses. There seems to be great suspicion among college men. The president tried to break this news to me very tactfully by saying that he knew as busy a man as I was could not spare more than ten minutes for an address for this association. Of course, I realize that he had something entirely different than that in his mind. It recalled to me again the story which I have already told to some of you of the college professor who stopped in the midst of his lecture, and, turning to one of the freshmen, said, "Mr. Brown, I can't object to your taking out your watch in the class, but I must enter a very hearty protest against your holding it up to your ear to see whether it is still going or not."

No matter what my personal feeling may be, therefore, I do heartily welcome you on behalf of the institutions of Washington: George Washington University, the Catholic University of America, the Georgetown University, American University, Howard University and the other institutions of the college and preparatory school type in the District of Columbia, to this convention. Really I do not think that we need to welcome you; it seems to me that this is a sort of a homecoming day.

Washington is not our city. That has been clearly demonstrated by the fact that we have no vote here. Washington belongs to the people of the country at large; and so you are merely coming back to your own city, as I believe every citizen in this

country should come; because we need to have more and more in our minds the meaning of what our great government stands for and what it means to us.

We are very much interested at George Washington University in the pilgrimages of students to the city of Washington to learn something of their nation's capital. The representative of one of the railroads told me that last spring, between the Thursday before Easter Sunday and the noon of Easter Sunday, that one railroad brought into the city of Washington ten thousand high school students. It is our hope that in some way here at our down town university we will be able to have these students come first to the institution to be given direction in an educational way as to what the city of Washington offers to them, to give a general background of all that may be seen in the nation's capital.

It is fine to have a meeting of this kind here in order to impress the government officials with the importance and with the necessity of education in matters dealing with government. Somehow they must recognize more and more the influence of these five hundred thousand young people in our colleges and the twenty-two millions of young people in our primary and elementary schools. Somehow they must realize if we are going to do what we should do in international affairs that back of the representative of the United States in foreign fields must be the right type of education. The Secretary of State pointed out to me one day the fact that what we needed in our foreign governmental service was more men and more women with a strong cultural background. And that is not recognized, I think, fully at this time by those who make our laws. Very evidently in the matter of international understanding and international peace the road to those things which we desire lies along the road of intelligent education. Our government is never going to be at peace with other nations simply from propaganda as long as the underlying causes of unrest exist, as long as there are hatreds and misunderstandings due to ignorance. And therefore we have a real mission in coming to Washington to impress upon those who are in charge of our affairs the necessity of promoting and aiding the right sort of education in international affairs.

I think it is a great thing to gather together as people interested in education, to discuss some of the problems which the

colleges and the schools are facing in this time of development of industrial and social life. I am very glad that some of these things are to be discussed. The problem of the entrance requirements, the problem of the relation of the preparatory school to the college, are very real ones. There are those of us who believe, I am sure, that a great deal of time is being lost today in the lack of correlation, in the lack of co-operation; that we are wasting done in preparatory schools, and that the preparatory school is years, that we are doing things in college that should have been doing certain things which perhaps are the function of the college.

There is a tremendous problem in the matter of the orientation of work. We teachers should think of our work not in terms of isolated and separated courses, but in terms of the product of our schools and of our colleges in the life of the nation and its activities. We have to think in this time of overcrowded colleges and universities of the proper system of entrance and the proper system of continuation in the college and university. All these things make it vastly important that we get together in a meeting of this kind.

And so on behalf of the University of George Washington and our sister universities I do welcome you. And I do hope tomorrow when you are at the George Washington University you will see something of the development in our new university plant. You perhaps do not know that out of our five thousand students more than half of them come to us in the late afternoon from the government department, and that many students come to the other universities because of the peculiar opportunity offered here. When students go to the law school of the George Washington or Georgetown University who want to study patent law, they may frequently secure work in the patent office where they earn their living and at the same time learn the practical side of patent law. Of our students in the engineering school, more than a hundred work at the Bureau of Standards in the daytime on engineering problems, and then come to us late in the afternoon and get the theory of engineering. Those things make our institution rather an interesting one, and we hope for your interest in what we are doing and what we intend to do. We want to make you very happy at the university tomorrow and to extend to you any courtesy that we can in any way. I thank you and I hope for you a very happy time in Washington.

## RESPONSE

PRESIDENT DENBIGH

*Commissioner Tigert and President Lewis:*

On behalf of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, I thank you both for your gracious words of welcome.

Since 1888 this organization has developed from a small group of college teachers into a large association which represents both colleges and secondary schools within its territory. Its deliberations have been influential in shaping changes which have continuously made for more efficient working relations between the two types of institutions represented by its membership. To trace the outcome of its reports and discussions is to read the history of the standardization and coordination of college preparation and entrance requirements in the last thirty years.

It is to this Association more than to any other that we owe the inception of the C. E. E. B. which last year in round numbers examined 20,000 candidates at centers all over the United States and at many centers in foreign countries.

By setting up standards of approval for colleges and by the sympathetic, wise and broad minded action of its appointed commission, the Association has brought about improvements that without the stimulus it supplied had either never taken place or been very long delayed. It is attempting now a similar piece of work in a much more extended and in some ways a more difficult field—the field of secondary education. These instances of its activities do not, of course, begin to tell the whole story, but they suffice to show that it has done notable work for education.

It has been able to do such lasting and valuable work because in all it did it never lost sight of the true aim of education. It never confused education with mere instruction and information. It has not set up smoothly running machinery as an end in itself. It has remembered always that education is, as Dr. Butler has told us, the adjustment of the individual to his spiritual possessions. To make that adjustment more easily and more surely and to make the whole and not a part only of the race inheritance accessible has been its ideal. That is its ideal today. And the city of our meeting is one to quicken this ideal. We should indeed be



dull of imagination, if in this city of all cities we should see in its parks and streets and buildings only a concrete approximation to the dream city beautiful of the soldier-engineer who planned it, and not see with our mind's eye a prophetic vision of the America that is to be when education shall have wrought its perfect work.

You, Mr. Commissioner, and you, President Lewis, are spokesmen for all those whose hospitality has made possible for its the inspiration of a meeting here. To the George Washington University, to the Catholic University of America and its sister institutions, to the city's public and private schools, to Mr. and Mrs. Sidwell and many others, the Association extends its grateful thanks.

GENERAL TOPIC—PROGRESSIVE EDUCATION IN ITS  
RELATION TO THE BETTER PREPARATION  
OF COLLEGE ENTRANCE CANDIDATES*(a)—What Secondary School Subjects are Really Fundamental  
in Preparation for College Work?*

WILSON FARRAND, Head Master Newark Academy

*Mr. President, Ladies and Gentlemen:*

I am glad, even at this late hour, to discover what my function is to be this morning, for I have been in considerable doubt in regard to it. When President Denbigh asked me to speak on this particular topic I of course accepted without question, because those of us who have been accustomed to work with Dr. Denbigh usually obey him when he tells us to do anything. If we were in the trenches and he told us to go over the top, we would do it, even though we knew that we were running into a machine gun nest. After accepting the invitation I asked him what I was expected to do. His reply was: "Treat the subject in any way that you please. All that you have to do is to start something." Naturally that troubled me a good deal, for there is nothing to which I am more averse than controversy. When I received the program and discovered that the main subject this morning was "Progressive Education in its Relation to the Better Preparation of College Entrance Candidates," and that I was to be followed by one of the high priests of the progressive cult, it appeared to me that I was put up as a hide-bound conservative to proclaim the old time view and to afford a target at which the progressives might shoot. No man likes to be labeled as non-progressive, and as Dr. Denbigh has indicated, there is nothing to which I object more than stirring up a fight. However, as he has just told you that what he wants from me is not the stirring up of a fight, but an analytical, philosophical discussion of the subject, I shall try to analyze the topic and to deal with it in an entirely uncontroversial way.

What are the fundamental subjects in secondary education; that is, the subjects that are fundamental in preparation for college work? Having had my mind sharpened as to the meaning of words by a family devoted to crossword puzzles, I question whether the committee really intended that word "fundamental,"



for I question whether there is any subject that in a strict sense is really "fundamental" for college. There may be—I am not sure of this—there may be subjects that are essential for college preparation. There certainly are subjects that are important, and subjects that are valuable, and I presume that what I should do this morning is to try to point out which subjects, if any, are essential, which are valuable, and which are important in preparation for college work.

In what way is a subject valuable or important in preparation for college work? It seems to me that it may be valuable in one of three ways. It may be valuable as a tool, in the way, for example, that reading is valuable as a tool for the study of any subject a knowledge of which is to be acquired from books; or in the way in which arithmetic, the power of calculation, is valuable as a tool for advanced work in mathematics or in science. It may be valuable, in the second place, as a background to illuminate and vivify work; to give the student a better idea of what he is working for and the relation of his study to other subjects and to his underlying purpose in life. Probably the subjects that will best illustrate this use as a background are those which may be called the informational subjects. A student who has a knowledge of history is better able to understand the meaning of his work in economics or in philosophy. A knowledge of literature gives the student an idea of the real meaning of his language studies, and a knowledge of science shows him the significance of any scientific work in which he is engaged.

The third way in which a subject may be valuable as a preparation for college work I mention with some hesitation. This is its development of the power of concentration and of continued, systematic work, or, what may be characterized as training. I say that I mention this with hesitation, because we recall all that has been said in recent years in regard to the non-transferability of power, and all that has been said about the antiquated idea of mental training as an object in education. However, I am old-fashioned enough still to believe that there is such a thing as mental training, and that this training, developing the power of work, is one of the greatest things to be considered in preparation for advanced work in college or university.

These are the three ways, it seems to me, in which a study may be important or valuable as a preparation for college work.

Now, what of the studies themselves? What do the various studies contribute in these three ways? First of all, let us take the subject of English. Now, the study of English as carried on at the present time is really in two parts: the study of the language, developing the power to read and interpret; and the study of literature, giving an acquaintance with the great works of English. The English language, it seems to me, is preeminently valuable as a tool, and comes near to being an essential tool for work in college.

Mathematics should probably come next in our consideration, for it is the one other subject which has value as a tool. It is undoubtedly valuable as a tool for advanced work in the same subject, and to a certain extent in science, but the amount of mathematics that is important as a tool for college work, in the case of the ordinary student, is distinctly limited. Mathematics is decidedly valuable, however, as a mental training and as developing the power of clear, logical reasoning in a way that probably no other subject in our curriculum does.

The third group of subjects comprises the languages, which may be divided into two classes: the ancient languages and the modern. The classics are primarily valuable for the training which they afford. There was a day when Latin was valuable as a tool without which one could not pursue higher studies. That day, however, has long passed. Latin—and I confine my remarks to Latin because Greek has so nearly disappeared from our secondary schools—Latin is also valuable as a background, but its great value is in the mental training that it gives, and in the power that it develops. It does this partly because of the nature of the subject, partly because of the way in which the teaching of the subject has been developed and standardized, and partly, also, because it is the one study which, with the single exception of English, is pursued longer and more continuously in school than any other. It is in the fact of its long-continued study that you find the secret of a great deal of the real value of Latin as training.

The modern languages can hardly be called essential, or even very important, as tools for college work. They are vital for advanced work and for graduate work in the university. It does, of course, add to a student's power if he has the ability to use French or German textbooks, but at the present time it is entirely possible to get practically full benefit from a college course without

the use of either French or German as a tool. These languages are not as valuable as Latin for mental training, largely because of the method by which they are taught and because they are studied with their practical use constantly in view. They are also valuable as background, but not in the same way in which certain other studies are valuable.

Science is valuable chiefly as background. The way in which science is taught in our schools at the present time makes it also valuable as a training, but I feel that the way in which it is handled at present is for many of our students a mistake. The real function of science in the secondary school is to orient the student, to give him an idea of what the world of nature is, to enable him to diagnose his own power, to help him see whether he has the taste and the ability to pursue that line of work or not, and to assist him in shaping his plans for the future. I am perfectly frank in saying that our modern college requirements in Physics and Chemistry, which are the subjects most commonly studied, are a mistake, in that they have been regarded by those who framed the requirement too largely as a means for developing future physicists and chemists, rather than as a means of arousing the student and of giving him a background and a better understanding of what he wants to work for.

History and the social studies are valuable chiefly for the background that they afford, in that they enable the student to see what the world means and what he is working for, and to give him a better understanding of the value of other subjects. As they have been taught up to the present time they are not particularly valuable either as tools or for the training that they give.

Now we come to the point where there may be controversy. Which of the ends that I have named are most important, and which are those that should be pursued? Should the preparatory course of the student be shaped primarily to give him the tools with which he is to work, to give him the right background, or to give him the power to do college work? Of course, he must have the necessary tools, but if my analysis is correct, the things that he needs as tools are few, and of those the only one absolutely essential is the English language. If to that you add a little of mathematics—not as much as we now call for—you will have given the most of the things that are important as tools. Shall the rest of his work be chosen primarily for its value as mental

training, as developing his power, or shall it be chosen with the idea of giving him a background and of enabling him to orient himself. On that point I have no hesitation whatever in saying with absolute emphasis that the thing which is of vital importance is that the student should develop as far as he can in his preparatory work the power of application, of concentration, and of continuous work. That means, if my reasoning is correct, that the essential subjects for college entrance are English and a certain amount of mathematics, while the bulk of the work should be chosen primarily from those subjects which will develop in him the greatest power of application and of concentration.

Now, without going more into detail, let me make a practical application of this. That may possibly be the best way of erecting a target at which the opposition may shoot. What should the college absolutely require for admission? It should require English, and, in addition to that, a minimum of mathematics.

*A Delegate:* How much mathematics?

*Dr. Farrand:* If our requirements were shaped a little differently from what they are, I would say less than we now have—a smaller amount of Algebra and an introduction to Geometry. I will, however, answer the question indirectly a little later.

Then, I think that the college should require a comparatively large dose of language, because language is the subject that is most valuable for mental training, because a knowledge of other languages is extremely valuable for its effect on the student's English, and because a certain amount, at least of acquaintance with modern languages, may be of value as a tool.

I would also have him supplied with a background. I think it highly desirable if possible that a student should form some acquaintance with the field of science in his early days before his mind has become fixed. While still in the plastic stage he should learn what science is and what it means, and should have a chance to discover his fitness or unfitness for it, in order that he may be able to decide intelligently whether he wishes to work in that line or not.

Also, one should have some knowledge of history as a background. For the social studies, as they are now taught, I am sorry to say, that I have not great sympathy, because most of

those subjects like economics cannot be thoroughly mastered or understood at the secondary school age, and one of the greatest weaknesses of our modern education is its superficiality and its development of the habit of formulating judgments without a solid basis of fact. While it may be desirable that a student in his school days should be introduced to some of the great problems of government, of society and of the world about him, he will come out, if he is going to have a higher education, a stronger man, better fitted to deal with those problems, if in his early days he has laid a foundation of sound reasoning and real mental training, and takes up those subjects at a time when he has a sound basis of knowledge on which to form conclusions and a matured reasoning power that will enable him to deal with these subjects in something more than a superficial way.

The question, however, is not what shall the college require? In regard to this there are two extremes of opinion. On the one hand we have the old idea—and there are still some who advocate it—that when the college is strong enough it should say, "No one shall enter these doors who does not have the old academic training in the Classics, including both Latin and Greek." On the other hand, there are those who say that the college ought to accept anything that a school offers, and that any student who has completed a high school course should be admitted to college and allowed to go straight ahead. Now I will admit that any student who has had his interest in study aroused ought to have an opportunity somewhere, but if we organize our colleges on the basis of providing an opportunity for every student, no matter what his preparation has been, we are certainly going to cheapen our higher education.

I am reminded of the story told of James Russell Lowell, who on one occasion met a distinguished Englishman in Boston and took him home to dinner without giving advance warning to his wife. The Lowell household was a simple one. It was Friday, and in accordance with the traditional New England custom Mrs. Lowell had prepared a fish dinner. You may imagine her feelings when the distinguished visitor was offered fish and replied: "If you will allow me, Mrs. Lowell, I will skip the fish course tonight." The point that I make is that you ordinarily will order your eating differently if you know that the course before you is to be the last, from what you will if you know that there is another course

training, as developing his power, or shall it be chosen with the idea of giving him a background and of enabling him to orient himself. On that point I have no hesitation whatever in saying with absolute emphasis that the thing which is of vital importance is that the student should develop as far as he can in his preparatory work the power of application, of concentration, and of continuous work. That means, if my reasoning is correct, that the essential subjects for college entrance are English and a certain amount of mathematics, while the bulk of the work should be chosen primarily from those subjects which will develop in him the greatest power of application and of concentration.

Now, without going more into detail, let me make a practical application of this. That may possibly be the best way of erecting a target at which the opposition may shoot. What should the college absolutely require for admission? It should require English, and, in addition to that, a minimum of mathematics.

*A Delegate:* How much mathematics?

*Dr. Farrand:* If our requirements were shaped a little differently from what they are, I would say less than we now have—a smaller amount of Algebra and an introduction to Geometry. I will, however, answer the question indirectly a little later.

Then, I think that the college should require a comparatively large dose of language, because language is the subject that is most valuable for mental training, because a knowledge of other languages is extremely valuable for its effect on the student's English, and because a certain amount, at least of acquaintance with modern languages, may be of value as a tool.

I would also have him supplied with a background. I think it highly desirable if possible that a student should form some acquaintance with the field of science in his early days before his mind has become fixed. While still in the plastic stage he should learn what science is and what it means, and should have a chance to discover his fitness or unfitness for it, in order that he may be able to decide intelligently whether he wishes to work in that line or not.

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to follow; and so, while it may be that the boy or girl who has taken a haphazard course in school ought to be allowed an opportunity to go ahead, it does not necessarily follow that such a course offers the best preparation for college work, or that it is what we should recommend to the student who desires the best.

The question is not so much what should the college require, as it is what shall the college encourage and what shall we who have to deal with the preparation of students for college advise our boys and girls to take? In closing, let me answer that question concretely, and let me state, as my personal creed, what I regard at the present time to be the best preparation for college work.

In the first place, of course, comes English, with the emphasis on the mastery of the English language, on the power of understanding, and on the power of expression. In the next place, mathematics. At present I would include Algebra as we have it, and the whole of Plane Geometry, but if our mathematicians who are working on this problem can devise some more elementary scheme than that, I should not object very decidedly.

We hear a good deal of talk, you know, about boys and girls who cannot master certain subjects. In the Head Masters' Association several years ago, we had a most interesting discussion as to whether there were any boys or girls who could not master mathematics. We threshed it out thoroughly, and finally concluded that there was no boy or girl—not a moron—who could not master mathematics.

Then, if possible, I would have a boy take Latin. I say "if possible," because there are two classes who should be excused from it. One is the type of student who has no language sense, or who is distinctly lacking in language power. The classic instance of this is one that occurred in my own school, long, however, before my day. I had heard my father frequently tell the story of this boy, whose father was dead, and whose father, grandfather and uncles had all been graduates of a certain classical college. This boy was the heir of all the ages, and his mother felt that he was predestined and fore-ordained to go straight ahead and take the classical course at Princeton. At the proper time he began Latin, but simply could not master it. My father told me that he had never seen a boy work so hard at a subject and yet utterly fail to grasp it. He advised the giving up of the subject, but the mother would not hear of it. Finally the



crisis was reached, and he said to her: "You will have to consent to his giving up Latin, or he will have to go to some other school." It was a tragic case. The mother wept, and asked, "What will become of him; what can he do?" My father replied: "The boy shows considerable mechanical ability. If I were you I would recognize that and give him a mechanical training and see whether he cannot accomplish something in that line." With tears she finally consented, and the boy went to Troy to the Rensselaer Polytechnic Institute. When he died, some years ago, he was Professor Henry A. Rowland of Johns Hopkins, probably the leading physicist of the world at that time. When, after Rowland's death, I told that story to President Remsen, who had been a colleague of his for years, he said to me: "That is extremely interesting. Rowland had a vacuum on the language side of his brain." Now, there are such cases occasionally, and there are also more frequently those who do not have a vacuum on the language side of their brain, but whom apparently no school, no teacher, no enthusiasm in regard to the subject, can stir to make Latin a real live subject. The better our teaching, the fewer of those cases we will have, but there are some cases where I believe that it is unwise to force the student.

I would have the boy, if he could, take the full four units of Latin. If he developed strongly on the scientific and practical side, I might cut off the fourth unit of Latin and give him instead the fourth unit of mathematics, so that he would have continuous training in at least one subject. We should then have three units of English, three or four of Latin, and three or four of mathematics, making ten in all. Then I certainly would add to that one modern language. If possible I would give three units instead of two, because of the greater value that would come from the more complete mastery of the language, and also because of the better training that would come from continued work in the subject.

Then, if possible, I would, as I have already indicated, give the boy a unit of science, in order that he might find out what science really is; and I certainly would give him a unit at least of history.

Let me add one other benefit of such a course as I have outlined. Probably one of the most frequent questions that comes to us secondary teachers is at the point about three years before college entrance, when a father comes in and says: "What do

you advise my boy to take at this time?" The first question that we ask is: "What are your plans for the boy?" He replies: "Well, if he develops as a real student I should like him to go to the college of his choice and take a classical course. I would prefer that for him if he develops as a student. If his interest in automobiles and wireless and electricity proves to be a real bent and not a fad, it might be better for him to go to an engineering school and get a technical training. If he does not develop as a student, and shows no special bent, I shall not send him to college at all. I will let him get a good all-round school education and start him off in business." I reply to him: "That is a pretty stiff contract that you are putting up to the school. You want your boy equally well prepared for an academic course in college, or for a technical school, or for business. However, the case is perfectly clear. He is now studying English and mathematics. He has begun Latin, and has made some progress in a modern language. Let him now add to that a science, and let him leave place in his course for history. He then will not have to decide until a year before he enters college whether he is going to Williams or Amherst—picking two colleges that absolutely require four units of Latin for all students—or whether he is going to Stevens Institute or Boston Tech. In other words, the necessary choice is postponed until the last possible moment. If he is going to a classical college he can go on with his Latin through the last year of school, or if his face is turned in the direction of engineering he can take advanced work in mathematics and additional work in science, while, if he is to go out into the world and is not going on to higher study he at least has studied English and mathematics, has had an ancient language and a modern language, and an introduction to science and to history. In other words, he has done something in every department of modern education."

Now, Mr. President, I do not know whether I have done what you expected of me. I have tried not to arouse controversy; I have tried not to be too old-fashioned and conservative. I hope, however, that my language has been clear and that I have made plain my position. If I have set up a target at which to shoot I shall not complain.

### DISCUSSION

*President Denbigh:*—The thing that all of us admire so much about anything that Mr. Wilson Farrand does for us is that we are pretty sure never to come out by the same door as the one that he takes. He always has something definite to say and knows what he thinks about what he is going to say. I hope some of you in discussion will cross-examine him on why there should be a language vacuum on the side of anybody's head and no mathematical vacuum.

*Mr. Farrand:*—I do not think that mathematics is quite as esoteric as language, yet there may be something approaching a vacuum on the mathematical as well as on the language side. That is the reason I suggested there might be a little less required than we now insist on.

*Mr. Cooper (Cornell University):*—How can one study English if one has no language sense?

*Mr. Farrand:*—All I can say is, if a man has so little sense that he cannot learn to comprehend plain English and to express himself in plain language, he is hardly a fit candidate for a college education.

*Mr. Cooper:*—Well, it seems to me if he hasn't sense enough to study Latin he is hardly fit. In respect to an extraordinary case such as that of Professor Rowland, I think that it may be ruled out of general consideration.

Of course, as some of you may know, I am tremendously strong for the study of Latin as a means of developing English as it is. It seems to me the secondary teaching of English has more or less fallen down, and judging from the results in the university, the students who have done pretty well in Latin in secondary schools are far more likely to do well in English in the university. I am very strong for more English or better teaching of English in the earlier grades, and for much more of the study of Latin or some other foreign language in the latter part of the secondary school curriculum.

*Miss Chandor:*—I should like to ask Professor Farrand how he can prove that Latin provides better mental training than

science or the social sciences. There are some of us who do not agree to that.

*Mr. Farrand:*—I do not think that I could prove it. I have simply stated my creed and my faith from observation. I should have to make several other addresses or take the rest of the morning if I were to give reasons for it. I will simply say this—stating personal beliefs at this time—that the value of Latin as mental training has been pretty well proved by experience. The value of science and the so-called social studies is claimed. We are watching with great interest the work of the progressive cult, and when they have proved it by their experts we shall be very glad to accept it. At the present time I, for one, cannot.

Mr. President, I have answered the questions I came for. Now may I tell another James Russell Lowell story? During Mr. Lowell's life he had a business acquaintance who was a bar-keeper in the Tremont House, and with whom he used to have some interesting conversations. This man had a theory that the flavor of canvas-back ducks came from wild celery, and that if you could take the tame ducks and feed them wild celery you could get a flavor equal to that of the canvas-back. He always said when he got enough money he was going to start a duck farm and try that theory; and on one occasion he told Mr. Lowell that he had the money and was going to try it. A year or so later Mr. Lowell came in and found this man behind the bar again. He said: "What does this mean? Didn't your theory work out?" "Oh, yes; the theory was all right but the damned ducks wouldn't eat the celery."

*President Denbigh:*—There was a gentleman here down in front who wished to speak.

*Mr. Bell (St. Stephen's):*—I am from St. Stephen's, which has the honor, I think, of being the smallest college in the east, which gives us an opportunity to study what our freshmen do and compare it with their preparation with somewhat more detail than is always possible. And five years of observation of every man that has entered our college has convinced me that possibly the most practical thing that was said in that address just made is the criticism of English, which seems to be taught more from

the point of view of a background than as a tool. When we prove that to the preparatory school teachers, most of them say that they have taught it that way because of the entrance requirements laid down by the College Entrance Examination Board, which require so much attention to literature, that with the time at their disposal they cannot teach English as a tool.

That is a weakness that has caused a greater handicap than anything I know to students in our schools, especially those in the high schools, who are apt to be people of much less background, naturally, than those who come from the private schools.

*Mr. Farrand:*—I agree absolutely with that. There is nothing more disheartening to an English teacher or a man who is interested in studying English than the mistaken opinion on the part of the English teachers throughout the country that their function is to teach literature and to inculcate high ideas instead of making the language their fundamental issue.

I rather resent the imputation against the entrance requirements of the College Entrance Board. If Dr. Bell will study the college entrance examinations since they were first made uniform, which was back in the year 1898, if I remember correctly, he will find that there has been a steady progress in the direction of less emphasis on the knowledge of particular books and general reading and a greater emphasis on the ability to understand plain language and to express it plainly. We are working directly toward that end, but we are having an awful job to convince the secondary school teachers, particularly the high school teachers, who have the idea that they must drill on books, and that their great function is to infuse into the children great ideas instead of teaching them to understand ideas that have been expressed and to express the ideas which they have gained from their education or their environment.

*Mr. Walter D. Head* (Nichols School, Buffalo):—*Mr. Farrand's* speech, which was essentially a discussion of the curriculum, is important from a number of different points of view, but to me chiefly because there seem to be impending changes of an important character which are likely to take place in the near future in the secondary school curriculum. What these changes are going to be it is very hard even to guess at the present time, and while we

are waiting in a state of transition, we shall do well to keep clear in our minds the fact that the curriculum, important as it is, is really secondary to the teacher and to his spirit and point of view.

For that reason the title of Dr. Caldwell's paper, referring as it does to a "new spirit" in science teaching, is most promising. The most largely educational and cultural class in a secondary school of which I have personally ever known was a class in Greek, but this class got its unusual quality not from the subject so much—though I am quite willing to admit that Greek has strong values, both educational and cultural—as from the man. He was that kind of teacher who did not hesitate to talk of neckties or choice of pictures—any subject which he felt was of value to his boys and which was suggested by the course of the recitation. A course in English literature may be highly inspirational when taught by one teacher or equally deadening in the hands of another.

In the modern languages those teachers who know how to turn aside from the teaching of irregular verbs and vocabulary to give their pupils insight into the life and thought of modern European peoples, are giving to their instruction values which will be remembered long after facts of grammar and vocabulary have been forgotten.

It was Aristotle who said, "Education consists of opening minds, not filling them." In a word, the right kind of teacher will make any subject educational and cultural. If we keep this point clearly in mind it will help us to keep our balance during this transition period when views on the curriculum are likely to be confused and uncertain, and will make it possible for us to view the whole subject of the curriculum from a normal point of view, not allowing it to upset us or to shake too deeply the foundation of our educational faith.

*Mr. Herbert W. Dutch* (Montclair High School):—May I speak for the cosmopolitan public high school, to which this is a practical problem of administration? I have no quarrel at all with Dr. Farrand's splendid analysis of this problem. He has listed fifteen units, which, if distributed over the usual four years of the high school student's preparation, mean that practically all the work must be devoted to preparation for college. In the state of New Jersey we are confronted with requirements that introduce



compulsorily certain courses of civics and the problems of American democracy and physical training, and urging other subjects to be introduced as compulsory which take a part of the time that would be ordinarily given in the college preparatory course to those fifteen units.

I am wondering if the college must not recognize the secondary school problem as laid down for it by state departments and by those who have the preparation of those boys and girls for citizenship in its largest sense; that we must introduce subjects that are somewhat exploratory, but subjects which are calculated to develop those relations with our community and civic and national life that make for larger, saner, better citizenship, and which are not wrapped up in the college preparation. If our colleges will give four credits for four years of English and then permit us to have one period for a marginal subject, we can compass the preparation in four years.

I am entirely in accord with the spirit of Dr. Head's remarks, that it is the *spirit* of our education, and not the technical preparation, mere college preparation, with which we should be chiefly concerned. And the job that is cut out for the public school principal in the larger cosmopolitan high school is one infinitely bigger than the technical requirements for college. My job is about half and half. About fifty per cent of my boys go to college, from a town that is purely residential, with college background; so I cannot neglect that side of it. But I want to emphasize this: that the college requirements as now formulated do hamper us sincerely in our efforts to meet the larger demands that are now being made upon secondary education directly from our state authorities and from our conception of education as a big, large experience of human adventure.

*Mr. Farrand:*—Dr. Dutch has hit the nail squarely on the head, and that is one of the reasons why a great many of us are not anxious to see the federal government also get its hands on the subject of education. The method of reaching it possibly is something like this: that instead of naming fifteen units which must be expected, the college shall say it will accept twelve units in not more than four subjects, so that there is consecutive work in a number of subjects, and then allow one or two other units for those things that the states are foisting on the schools.

*Dr. Irvine:*—I agree with some of the things said here, but about some of them I am doubtful. I agree with what Dr. Head said about the personality of the teacher. I was thinking the other day of the men under whom I have been trained, and there are probably a hundred of them, in public schools—some women with them—the preparatory school at Phillips Exeter and the University. I can mention probably on the fingers of my two hands the men who impressed me most, who were men of great personality and great power. I recall Dr. Wentworth—we called him Bull Wentworth—the great mathematician. When I was going through Exeter years ago we helped him get out these textbooks. He would come in with a proposition in algebra or plane geometry he had gotten from some French textbook, and give it to all us boys, and we would go and struggle with it, like an original. And he always insisted on conciseness and accuracy, on down to the nth degree.

That man in teaching us mathematics taught us a great deal about literature. I learned from him about the Newcomes and about Thackeray and what Thackeray did and said. I learned a lot from that man about social science. I learned a lot from that man about the classics, although he was teaching mathematics. He had the power to hook up mathematics to the whole general domain of knowledge in an intelligent way of thinking that scared you, and you wanted to go and get it, and you went to the library and got it. And he would go right down to a fellow's shoetops and tell him what he was reading—"Wild Bill of the Alleghenies"—and advise him against it. At that time dime novels were in existence.

But it is not every man or woman who has that personality. Why? Because so many people do not try to enrich their personality. A man must have a rich personality before he can approach that. So I agree entirely when Dr. Head says that it is the personality that gives the inspiration of the subject. I do not agree that every subject has that same inspiration. I do not agree that the modern language gives the same power that the study of Greek can give. I have never seen it. I have been on the job thirty-two years preparing boys for college, and I have had a chance, as many of you have, to see what comes from this subject, that subject, and the other subject.



And there is another proposition put forth today that the teaching of English has degenerated. I do not agree with that at all. I think the teaching of English has risen steadily and obviously and in a marvelous way. I know the teaching of the preparatory school is a good deal better now at Phillips Exeter than it was when I was there, because the method is better, the requirements are harder for the College Board. One trouble is that in a lot of schools there is no checking up. I couldn't check it if it were not for the College Board.

If I had my way about it, I would make every boy in this country enter college by examination. And I would make every fellow that has a good body play football. It would do him a lot of good to get his nose rubbed in the dirt.

*President Denbigh:*—The remarks of the last speaker, I am sure, have raised enough material for discussion to the end of this session. But we have so good a thing waiting for us that I am going to ask you to hear the next discussion and then if there is time, to resume discussion of this paper.

The next paper is entitled "Wanted: A New Spirit in Science Training." In some form or other that question was suggested to us on the program from many quarters. I then sent out, when it had been determined upon, a request to the people who had suggested the question in some form or other as to the names of speakers. Curiously enough we received one suggestion from all those quarters. They said, "Let's have Dr. Caldwell, of the Lincoln School." We were fortunate enough to get him. I am very pleased, indeed, to be able to present him here this morning on this subject.

## (b) WANTED—A NEW SPIRIT IN SCIENCE TEACHING

OTIS W. CALDWELL

Director of the Lincoln School and of the Institute of Educational Research, Teachers College, Columbia University.

*1. Is high school, or is college education changing more rapidly?*

This discussion proceeds upon the theory that the best education for young people of secondary school age should be best for them whether they do or do not go to college. Further, it is assumed that those who go to modern colleges, as those who do not, are in great need of a sound general education dealing with the knowledge and the arts which enter into current life. All need an education which shall illuminate knowledge and arts, and by purposeful use of them shall develop enduring social and personal ideals concerning those aspects of modern knowledge and arts which enter into the lives of young people. It may even be argued that those who go to college are, in proportion to their numbers, more greatly in need of a socially meaningful secondary education, since they are later to have opportunities for larger intellectual influence, and thus need to be more secure in their understanding of the real human services of modern secondary and collegiate scholarship. A further basis of this discussion is found in the fact that much more study has been made in the past decade bearing upon improvement of secondary school subjects and methods than has been true of college subjects and methods. The scientific study of education has been directed toward levels below the college in the main, very few careful educational studies having been made in college, and doubtless we shall soon have college subjects and requirements studied to the end that they may adequately continue the slowly but definitely improving secondary school subjects.

In the following discussion of the sciences, it is not to be inferred that they are regarded as being either more, or less important than other subjects of instruction. It is probably true that more advancement has recently been made in science instruction than in most other secondary subjects.

*II. The public believes in science.*

It is not news to state that appropriations of public funds are more readily secured for agriculture, for household arts, or for engineering than for most other purposes. So well recognized is this fact that programs for general education or for other purposes are not infrequently associated with applied science for the sake of the increased hope of successful support. The common people believe in the kinds of science which yield benefits which they can see clearly and soon. They are slowly but steadily coming to believe in the development of scientific principles whose fruits may be more ultimate but possibly more important.

*III. The public uses science.*

The public use of science is so constant as to make even a meagre picture of it impossible. All our working days and all our nights, either in recreation or rest, are ordered upon the uses of modern sciences. Surely no advocate of an improved science teaching can quibble about the public's being slow to use the material fruits of modern science knowledge. There may be a few belated users of science but natural processes of removal of the ill-adjusted seems soon to catch those who lag too far behind the advancing crowd of modern peoples. Educationists need have no great worry as to whether the immediate material benefits of scientific discovery will be accepted by most people. Whatever may be thought or said about the educational use of the sciences in schools and colleges, current life has accepted the sciences, and constantly asks, expects, and receives the cumulative material benefits of modern scientific thought.

*IV. Science is everywhere, both in affairs and in schools.*

The quantitative use of the sciences in common affairs and in schools and colleges is now more extensive than at any preceding time. Dr. E. R. Downing, who has given much time to a study of the sciences in Europe and in America, says that we teach as much science in elementary schools as is done in Europe, and that it is done better in this country. Also, during the past ten years there has been an increase in science in elementary schools of the United States. Elementary science has lost much of its earlier foolish frivolity and is gaining in content, orderliness and purpose.

In high schools there has been large increase in the quantity of science instruction, the greatest increase having been in those commonwealths in which definite programs of science sequences have been adopted. In Pennsylvania, for example, in the State Report of 1923, a pupil registration increase of 19.8 per cent is recorded in one year, this figure being based upon a calculation including all four year high schools within the state. So far as recorded this is the largest yearly increase in any state.

In colleges and research institutions, there has been great increase in the provisions for and acceptance of opportunities for work in the sciences. Independent industries have very generally established research departments which are adequately supported and are manned as well as is possible with the present training of research workers. New science knowledge is constantly coming from these and other centers of careful study, to such an extent that we are no longer surprised to have our daily paper make announcements of discoveries of very great import. Great discoveries are now so frequent that we note them almost as the expected content of the daily press.

*V. What has caused the change in the science situation in high schools?*

The recent and unprecedented growth and refinement of science knowledge has produced many new branches of science, each with its own "ology," each with its own body of special knowledge, methods, and special workers. In many cases these special and highly refined subjects were crowded into the secondary schools, and at the same time the ancestral body of common aspects of science was crowded out. The secondary courses became summaries of collegiate courses, not elementary and wonder-satisfying insights into significant topics for young people. The extent to which this is true is not realized unless we make a real study of the facts in the case.

Let us take collegiate and secondary physiography as an example, and compare a comprehensive college textbook in the subject with a secondary school book in the same subject by the same author. Possibly the best college text ever written in this subject is Salisbury's *Physiography*, which appeared in 1907. His high school text appeared in 1908. The college text is for students

who elect the course in any college year. The high school text is for use, as the author says, "For first or second year high school pupils." The college text has 770 pages; the high school text, 531 pages. The college book pages are larger than those of the high school text so that when equated in size the college book would have 840 pages compared with 531 in the high school book. The college book has 707 illustrations; the high school book has 469, the latter being almost always identical with the same number used in the college book. There are 24 maps in the high school book, 14 of which are identical with 14 of the 26 in the college book, 7 others being almost identical with those of the college book, thus making 21 of the 24 maps almost or quite identical with those of the college book. There are 26 chapters in the college book and 20 in the high school book; however, 17 of those of the high school book are the same as 17 of those of the college book; one other high school chapter is composed of two college chapters combined without material change of the topics or contents; and another high school chapter on the topic, "The Ocean," consists of a combination of five college chapters which in the college text are upon subdivisions of the topic, "The Ocean." In the high school book, the chapter dealing with "The Ocean" has five subdivisions, each of which has exactly the same heading as that of the corresponding college chapter. Within the text matter, many sentences are identical with those of the college text, the condensation having been secured in the main by clipping—not by rewriting. We have, however, accounted for but 19 of the 20 chapters of the high school book, though we have accounted for the 26 chapters of the college book. The added high school chapter which does not appear in the college book is upon the topic, "Physiography and Its Effects on Plants and Animals," this chapter having been written not by the physiography author but by two teachers who had taught younger people.

It is not likely that such a close analysis could be made for many such cases, but the same point may be clearly demonstrated by a study of certain college and high school books in physics, chemistry, zoology, botany and physiology.

In a sense, it may be said that the very success of scientific advances in our time has caused the objectionable high specialization in secondary schools. College specialists have set special

technicalities as the body of requirements to be learned by secondary pupils.

*VI. Dissatisfaction with technical work in science for the early years of high school was common as a result of the courses offered.*

Dissatisfaction became most notable in the early years of secondary schools. In efforts to improve instruction many so-called introductory science courses were tried in one part of the country or another. These included courses in physiology and hygiene, physiography, biology, or separate courses in botany and zoology; or even occasionally there were introductory courses in physics, chemistry, geology and astronomy. With all this array of so-called introductory science courses, dissatisfaction with science instruction increased, while science knowledge itself grew in value and public recognition. The college science men, when they spoke of the results of secondary science, seemed to take little more comfort in the situation than did educators in general; though the illogical conclusion was often stated that young people would do better and like the sciences more if they were compelled to take more of them. Compelling people to do distasteful things always has been a delusion of formalists. It seems not to have occurred to collegiate science to look into a reflecting mirror for part of the cause of the trouble.

*VII. A new type of introductory science course.*

Some fifteen years ago, several groups of science teachers had begun to use the methods of science itself in trying to develop the contents and methods of a more useful introductory science course. These groups formulated hypotheses as to what secondary science might perchance do for young people, then selected materials and methods designed to see if the hypotheses could be realized. It was found that the various introductory courses contained much very useful factual material; and that these materials from several introductory courses then in use could be more productively organized if a topical plan of unification were used instead of the special science subject plan. Thus came the course in general science. No one who is observing the workings of this course believes, I presume, that its organization, or methods, or outcomes are now definitely



determined. Perhaps they may not soon be, possibly should not be, but the startling and widespread success of this type of science course is one of the outstanding achievements of modern science.

*VIII. The unprecedented success of the course in general science should be interpreted.*

Various statistical studies of separate states, sections of the country, and of the whole United States, show the same types of results so far as numerical evidence is concerned. Only a few of these studies can be cited here. The Pennsylvania study, previously referred to, shows that of the approximately 202,000 four-year high school pupils in that state in 1922-23, approximately 54,000 were studying general science; and more were studying the other sciences than was true before general science was introduced. Dr. Edna M. Bailey, in a recently published and detailed study of California's four-year high schools of all classes, shows that in 1922-23, there were 71.2 per cent of all California four-year high schools which taught general science; also that the subject is in the junior high schools throughout the state.

Dr. F. E. Bolton, in a study in the state of Washington, finds that one-sixth of all pupils are now registered in general science, almost one-sixth in biology, and as large a proportion in physics and chemistry as was true before general science was introduced.

The report of the United States Commissioner of Education for the school year 1921-22, shows that in 13,700 public high schools, there was an enrollment of approximately 400,000 students in general science.

The point of view of general science is slowly finding its way into the other high school sciences. There does not seem to be a need of any reduction in quantity of learning in any special science subject—indeed it seems likely that the quantity of learning is being considerably increased. Its nature is somewhat changed, and this change toward a more significant science instruction should be useful both to high schools and to colleges, but most useful of all to citizens. Are the science men, the specialists, the ruling boards, really willing to have the subjects changed for this larger usefulness? If not, may we inquire whose property these science subjects are?



The question, therefore, of whether the public desires a new type of science instruction seems clear. It is a bit amusing to have the question raised as to whether college boards will accredit for college entrance a course which has found a place of such service in modern secondary education. Possibly these boards wish to put their own organizing and refining hand upon the course before giving it full recognition. They are respectfully requested to recall what occurred in the special sciences under these same hands.

*IX. There is a world movement toward changing science instruction.*

Our Bureau of Education published a report on secondary science instruction as Bulletin 26, 1921. This report was the result of seven years of work of a committee of fifty persons. Their recommendations are most important and are based not upon theory alone but upon practice in the best schools. It is the type of science sequences recommended in that report which is now operative in Pennsylvania, California, and most other states of the Union.

In 1918, a British science commission published a very comprehensive report by a committee, of which Sir J. J. Thompson was chairman. The recommendations of that report are in spirit and in many details closely like the United States report.

In the Orient, everywhere one goes, he hears of movements to improve and increase science instruction. It is a world movement, the whole civilized world realizing that the achievements and method of thought of modern science must be possessed by those who would aspire to progress.

*X. Why a new point of view of science instruction?*

Science knowledge and scientific methods of work are conspicuous features of modern life. Nature is being brought under control by man's mind. We know more of nature's truths than at any previous time in human history. We can fly or speak around the earth. We now know of ether waves by use of which to create new sense organs, as has been done with the radio. Indeed, the radio is nothing more than a new kind of ear which hears by use of wave lengths for which nature made no ear. We know of light

waves, by which we could see around the earth if only we had the right kind of eye to use these waves and sometime we may possess such an eye. There seems almost no limit to scientific accomplishment.

It is a matter of very great import to human beings whether modern science is learned by modern peoples merely that it may be used. If that is all, it is bad for those who learn it. Science knowledge has grown and will grow so that undreamed control of forces and materials will be had. Can the race be trusted with controls without an accompanying sense of responsibility for the knowledge thus possessed? The *proper* use of sciences in modern life, not only the *possibilities* of its use, must be developed in our courses of science instruction for young citizens in a free country. Such a sense of social and moral obligation, we dare not omit, else we shall have an increased speed and quantity of living without the restraining anchorage of social responsibility. Full responsibility for what we know, not mere satisfaction in what we know, must come from modern science teaching. "Knowledge is power," either for good or bad ends, but knowledge for social service must supplant the mere power idea.

It is not now safe for society or for some nations to possess certain knowledge which science now knows. Chemistry or disease bacteria properly understood and properly placed will destroy whole cities. Until people do not wish to destroy their enemies or their competitors, they must not possess the means or knowledge for doing so. Science courses for all the people must help all the people to interpret science for service, not science for power. Service, not power to control, is the needed spirit of modern science instruction.

## DISCUSSION

*Dr. Sharp* (Blair Academy):—We have had references to general science as a subject. I should like to ask *Dr. Caldwell* why the colleges do not accept that as a unit of preparation. A few do; most of them do not.

*Dr. Caldwell*:—Most of them do accept it. I took the pains to collect the information on that last summer, under the immediate care of a committee of graduate students whom I then had in class. They collected the information from many institutions, not from all: a state university out of each state, where there is one; what they regarded as the most outstanding, independent college in each state; and what they regarded as the leading teacher training institute within the state, sometimes a teachers' college and sometimes a school of education in the university and sometimes a leading normal school. Eighty-eight per cent of them accept general science for entrance credit now. Not all accept it as one of the specified sciences, but accept it as one of the units after the specific requirements have been met. So the percentage that I state covers both those that accept it as one of the units filling up the total requirement and those that accept it as science.

*Mr. Stanley R. Yarnall* (Germantown Friends' School):—I find myself very much in agreement with all that *Dr. Farrand* said a few moments ago; and it seems to me that while the statistics of *Mr. Caldwell* are very illuminating and interesting, he has hardly told us what some of us hoped he was going to tell us this morning, about how to put into science instruction the new spirit that we all feel is so desirable.

I am old-fashioned enough, I think, to prefer that boys and girls presenting science units for admission to college would present those units either in physics or in chemistry or in biology. Because I think there is a danger in the introductory science courses that there would not be the real training that should come with the opening of the mind and the attention to foregrounds rather than backgrounds. How are we going to get into our science instruction what most of the best colleges prefer—instruction in the sciences I have mentioned—so that our boys and girls are growing up with a real love of science and with that forward look?

May I illustrate what I mean by two visits to schools, one of them in 1920, in England, and the other last spring in one of our

most approved high schools, in a magnificently appointed new building. The United States school had everything that it was thought you could possibly ask in science equipment. I went in five minutes after a class in chemistry had gone out. Everything was absolutely cleared up; every counter was polished. I could not see any evidences of work having been done. And the principal showed me with great pride the little glass cases, in which I could see exactly where every paper representing an experiment had been pushed in. The class was finished. The boys and girls were through with that lesson and the building was perfectly beautiful to see.

The other school was the great English school at Oundle, that was inspired by Sanderson, the great headmaster. Those of us who have read his life, know that the word amplitude was the word that he particularly dwelt upon in connection with equipment. And when I was there, they were having their science examination in physics, some of the work of their last year at school. In those great laboratories there were table after table, and there were different sorts of apparatus; some of it was not as neat as might be. Everything was accessible to the boys and girls, and they did not sit down and write out a formal examination, although they had printed examinations supplied to them by Cambridge University, and Cambridge University had sent down the head professor and a number of assistants. Each boy received a paper—the papers were not all alike by a great deal—telling him that after a given time he must assemble his apparatus, set it up, work out the thing that the paper called for and make a demonstration, and he would be judged as the professors and instructors went around by his intelligence in selecting the apparatus, in setting it up and then registering what he was to register. And also we know who have studied the life of that great man that he introduced into his great school conferences on science, and would have groups of boys working on various problems that he gave them. Sometimes the problem would take months to work out, and then they would have a great evening, or a day, when everybody would be invited in to see the demonstrations.

There was working for social ends, for that was the great note of Sanderson in all of his work; and there was co-operation; and those boys were interested in discovering that they were not

doing forty experiments to report on and put in glass cases, but that the whole thing was vital and real to them.

It seems to me that where we are losing out in our scientific instruction is through the over-organization of our country, which we find in education, in athletics and almost everything we undertake. Are we not losing the spirit in the method? Is there any way that Professor Caldwell can point out to us where we can practically put this social discovering enterprise into work in science, instead of merely exactitude in meeting the college requirements for forty experiments, all bound to be alike and all tabulated in the same way and slipped into receptacles under glass cases?

*Dr. Caldwell:*—May I have just one or two sentences in reply to this interesting question raised? I think science teaching is better than it ever was before, and I think more teachers are interested in it. At least that is the evidence of students that has been given me. That does not mean it is what it ought to be, but it is going in the right direction. I think there is much more use of the devices of science which appear in common life. You find them everywhere; under the influence of those who help us to get those forty experiments, who tell us what to use in carrying out those experiments, and set up standards of equipment which do hamper us for awhile.

*Mr. Helton* (Penn Charter School): I should like to offer in this discussion that I feel an expression of profound, respectful disagreement with Dr. Farrand in his attitude toward both science and English. It seems to me that most of us who went into this profession of education did not go in primarily with the idea that we were going to spend our best efforts in training boys and girls to meet a certain set of rigid requirements given out by the American colleges. It seems to me that we went in with the hope that we would be able to educate and to develop something in boys and girls that was not there before, and not merely to train them for something, to perform mechanically a certain limited function that measured up to the College Board basis.

I believe that the course in English as laid down by Mr. Farrand is very fine, but I profoundly disagree with the proposition that it is our business to train boys and girls merely in business college English, so that they can use a few things correctly, pass

the examinations and get into college, without the great ideas ever being put into their minds. I would not look back to the time when I tried, vainly and feebly, to put great ideas into the minds of boys as a part of my life where I was least useful. I feel when we send boys and girls of eighteen or nineteen into the college, perfectly prepared as any two years business college can prepare them, to read senior English and spell words fairly well, we are not doing what we came into our business for. It seems to me that the thing we are here for is to give them more ideas. If we do not give them ideas, how can they express ideas? How can they have the little rhetoric book qualities of clearness, force, and all that, unless they have something behind them? Truth, tumbled over in their minds, is mixed up as any boy's imagination is bound to mix things up at that age. I honor the crude boys who cannot express themselves; because my experience has been that most of those who were crude at eighteen were so because they had something crude inside; and most of those who were letter perfect at eighteen were perfect because they were just following books.

*Mr. Bell (St. Stephen's):*—I should like to register just a word of disapproval of the language of the second speech on the general science course and its recommendations.

It surely is not the business of science teaching to teach the moral control of anything. It is the business of science teachers to teach men how to look at the facts and find them. It is necessary to teach men moral control, but it is a question of whether it is the scientist's business to do it; and I think most of the greatest scientists of the world would probably be in agreement in saying that this is none of their business whatsoever, that it is not the business of the science course to teach these things. The result of that kind of teaching is apt to be first of all a sentimental approach to science; in the second place, the creation in the mind of the student of an expectation that somehow or other scientists have discovered fundamental and basic truths about moral control. I do not think a good scientist would be apt to say they do.

Now, if we are going to teach boys and girls science in secondary schools, let us teach them science; general science, maybe, yes; but not a science that is a mixture of science, philosophy, ethics and religion. If we do that, I think the chief result will be that we teach them bad science.



*A Speaker:*—I am from Waynesburg College. Fortunately, or unfortunately, it is one of those small colleges that as yet belong to the great unwashed. We have not yet been admitted to the approved list. Our specialty in the past has been the education of ministers. I have been with that school for a matter of twenty some years now, and I have seen it slowly evolving from that old-fashioned type of religious school up toward the point that I believe we will be admitted to this inner circle, because we are getting some apparatus and because we have just put over an endowment campaign. And at the same time I have noticed the ministers falling off rapidly and the engineers increasing rapidly. And I am going to ask the last speaker if it is not the science man's place, whose place is it; and I am going to ask either Dr. Farrand or Dr. Caldwell, it doesn't matter which, another question. I liked the last part of Dr. Caldwell's talk, tending towards this thought; putting into a man's head an accumulation of knowledge and not putting there an education of the desires is like putting a high powered rifle into the hands of a savage.

Now comes the question: Why not on the faculty of the high school place a specialist in—I am not going to say religion—a specialist in ethics, as well as a specialist in science and mathematics?

*Dr. Caldwell:*—The American Association for the Advancement of Science, the greatest organization of the sort in the world, has for two years been considering the question which I touched at the close of my paper. But the association has appointed a committee to which twenty-two members have now been added—others will be added from time to time—to begin the study of this question; what is modern science trying to do? Now, those are men outstanding in the world as men of achievement. They are also men who see the course that we might take if we do not consciously face the question assigned to them. It is the start, you see, of the largest association of technical science men in the world on this study of this question.



## TEMPORARY COMMITTEES

### *On Audit*

Dean Walter Agard, St. John's College, Annapolis; Miss Valentine Chandor, Miss Chandor's School.

### *On Nominations*

Dr. Richard M. Gummere, Wm. Penn Charter School, Chairman; Mrs. Lucy M. Wing, The Madeira School; Mr. Howard Dutch, Montclair High School; Professor H. A. Watt, New York University; Headmaster John Leydon, Park School.

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## AFTERNOON SESSION

### GREETINGS

PRESIDENT R. E. BLACKWELL, Randolph-Macon College

*Mr. President, Ladies and Gentlemen:* I bring to you the greetings of the Association of Colleges and Secondary Schools of the Southern States. I do not know exactly what is expected of such a delegate as I am. But I thought you might care to know what our Association had attempted to do.

When it was formed, the colleges in the South had no entrance requirements, and therefore they had to do much high school work. A few institutions, largely under the leadership of Vanderbilt University, undertook to remedy this condition and organized the Southern Association for the purpose of raising college standards. It was steadily forcing the colleges to give up high school work and to enforce proper standards of entrance when the Carnegie Foundation came into the field and speeded up standardization. Our Association has become a standardizing agency and has been of great service to the South in raising the standards of both colleges and high schools. It has two commissions, one for passing on the fitness of colleges to enter the Association, and one on the fitness of preparatory schools to be put on the all-southern list of secondary schools, the students of which may be admitted to college by certificate. This list of accepted schools is used by the North-Central Association and we in turn use their list.

Anyone who has served for any length of time on one of these commissions sees the tendency of a standardizing agency to make

the letter of the law more important than the spirit, and to use its power to crush out schools that have proved their worth, though they may not meet all the technical requirements of the Association. And so some of us are a little afraid for the United States Government to be given too much power over the school system of the country. It is bad enough to have your state and the Southern Association laying down laws for your school organization.

Another matter of vital importance in our educational system that our Association has recently taken up for consideration is college athletics. The first report on this subject was made last year at our meeting in Richmond. Each institution belonging to the Association had been required to answer every question about its athletic situation that you can imagine, among them the salary of the coach as compared with that of the president and of the professors; the inducements given to athletes to come to college, etc. The report was a revelation, I assure you. Some coaches were getting more than the president, very many times more, counting the time of the service of the coach as two months and that of the president as twelve. The report was published in full in our proceedings and also, I think, in one of the publications of the Carnegie Foundation, which made a contribution toward the expenses of the investigation. The Association used the information given in the report to keep some colleges that had applied for membership from joining the Association, and came near expelling one college because of the unsatisfactory condition of its athletics. The Association felt that this investigation had been valuable and so the committee was continued with instructions to suggest remedies for the evil. Their next report will be made next week at our meeting in Memphis. It was the conviction that something must be done to keep athletics within bounds and to prevent, if possible, our students and our alumni and the public from thinking that we agree with them that the chief function of a college is to turn out a winning team.

Mr. President, you have provided a rich and interesting program for your meeting and I shall have much to carry back to my Association. I have enjoyed all that I have heard. I was especially interested in what has been said about teachers. The future is in the hands of the teachers. It would be interesting if I could illustrate it by telling you what happened in my section

of the country to the college students when slavery was before the country. It was surprising to me to find how many men went out from college opposed to slavery. The ideals of the young of today are going to be the realities of the coming generation. What you have said about teachers versus subjects taught also has much truth in it. What influences us most in college is not so much the subjects taught as the teacher. There was an interesting illustration of this a few years ago. We had a meeting in Richmond of alumni from many of the southern colleges. To vary the ordinary program, the toast-master proposed that each of us in turn stand up and tell some one thing that we learned at college; and to show what he meant, he said, "I learned that all Gaul is divided into three parts." Now he did not learn that at college, but at the high school. I remembered a Latin sentence that said, "A mind, conscious of its own rectitude, laughs at rumor's lies." This was another illustration of the worthlessness of many things we learn at college; for I have never been able to laugh at rumor's lies, nor have I ever found anybody else who was. One other person quoted something from Latin, but that was the end of even an attempt to give anything we had learned. The rest of the speeches ran in this wise: "I can't recall any particular thing that I learned, but I remember very distinctly Professor Brown and his influence on me was, etc." Yes, it is the teacher that we never forget. I said once to a professor of Greek in one of our southern universities, "I know why you are a teacher. I knew your professor of Greek." "O, heavens, no! He was not the man who made me a teacher. The professor of chemistry was my inspiration." It is not the subject, it is the teacher that makes us most.

GENERAL TOPIC—WHAT THE COLLEGE EXPECTS OF  
ITS FRESHMEN*(a) The Use of General Intelligence Tests in College*

DR. HERBERT E. HAWKES, Dean of Columbia College

*Ladies and Gentlemen:* The topic on the program asks the question, "What do the colleges expect of freshmen?" and the discussion of the topic is divided among three speakers. I assume that I am supposed to address myself particularly to the topic, "What does the college expect of the freshmen on admission to college?" rather than during the course of his college residence.

I would like, as briefly as I may, to give what seems to me to be a certain background of the recent movement which has resulted in the use of the so-called intelligence tests, which, it seems to me, is useful to have in mind if one understands or would understand their educational significance.

During the earlier part of the nineteenth century, our American colleges were pretty thoroughly static, not to say dormant. The curriculum was closely prescribed and there was very little opportunity for any election or any flexibility. If a boy went to college it was always a case of fitting the boy for college; the idea of fitting the college for the boy was not considered.

One of the first movements in the direction of individualism in our college instruction was due to President Eliot, although I am not certain that it was recognized in exactly that form at the time; but certainly the wide swing of the pendulum which had its origin in his influence resulted in the individual student's having a much greater share in selecting what should be done in college than he had ever before possessed. But, I think most of us now agree that the system of free election which was in vogue at Harvard thirty or forty years ago, and which has influenced very profoundly all of our educational institutions, was on the wrong track in one respect. It placed the responsibility for the election and selection of collegiate work upon the party who was the least competent to take that responsibility.

The fundamental assumption in President Eliot's mind, so far as I can understand it, was the conviction that the taste and the interest of the student was an adequate basis on which to found the entire structure of collegiate instruction; that what the young

man wished to do he would do with greater enthusiasm than what he did not wish to do; and that consequently he should do what he wished.

I think we have learned since that time by experimentation and by making many mistakes that unwise as our college faculties may be, and unwise as administrative officers may be, at any rate they have accumulated certain wisdom that students themselves do not possess. And although for the twenty years preceding the war our various colleges played with the system of free election, as developed at Harvard in the early days of President Eliot, the system did not gain complete headway, but resulted, as we all know, in a compromise; each institution working out its own local problem in its own way, usually insisting on a certain amount of prescription and allowing a certain amount of election.

This situation continued until the war without any particular modification or proposed change. But about that time two things happened which did more to modify the whole point of view regarding admission to college and collegiate work in general, than anything that had taken place for a long time before. In the first place there was the war itself, with its tremendous emotional and spiritual upheaval. Every young man in the land saw educated, uneducated, college, non-college young men taking their places and doing their bit. Even the despised college professor accomplished certain things during the war. And if the story of the accomplishment of men with collegiate training in taking up jobs, for which heaven knows they had no equipment, could be told, it would be one of the most interesting stories to be narrated in the whole history of our American education. I believe that the confidence, the faith that our American people gained in the function of education to prepare a man to do anything that he might be called upon to do, had a tremendous influence in stimulating the attendance in our colleges immediately following the war.

Now, this vision came on simultaneously with another event. Twenty-five or perhaps thirty years ago, the psychologists began to study the question of individual differences. I remember that when I was in college a professor of physiological psychology experimented with the janitor of one of the buildings in regard to certain reactions, and generalized to the human race from the results that he obtained in a manner that was exceedingly interesting, although to us it was not convincing. But at any rate

from that time to this, the psychologists have been studying through many different channels and by many different means this question of individual differences. During the war many things had to be decided very quickly in regard to the capacity of men in the army for various fields of service, and certain examinations were used, the so-called army alpha test among them. And although anyone here present can undoubtedly recall many amusing stories of how the keenest and most alert persons in their acquaintance were classed with the morons, it seems to me that the results of those tests for the purpose for which they were intended were on the whole very significant. It should be borne in mind, however, that these tests were not intended for people of collegiate grade, and are really, so far as I can learn, scarcely worth the paper they are printed on in determining the capacity of a student to take up or to pursue collegiate work. A different type of tests is necessary for that.

The result of the war brought about a tremendous pressure for admission to our colleges; a pressure which had never been felt before. Something had to be done about it. We had to select in a more discriminating way than we ever had before just who should come in and who should not. In certain cases the grade on the entrance examination was simply lifted to a higher figure than before. But experience seemed to indicate that if the pass mark on an entrance examination is raised to a certain point it does not pay to lift it any higher. There are too many good students who meet with a mishap on a certain examination paper and too many poor students who have just the opposite experience to make it a safe device simply to raise the passing mark.

As soon as the war closed the number of candidates for admission to college was very great. We felt that not all of them should come to Columbia College, probably not to any college. Some of them were fitted for a school for artisans; others, perhaps, for a commercial school; some, I fear, for the reform school. At any rate, a selection had to take place. It should be emphasized that the reorganization of our method of admission was due not to a desire to increase the number of students in college, but to decrease that number most sharply, but in a manner that would afford a homogeneous group of freshmen. It was not organized to exclude classes of applicants, but rather



to select the persons who were most competent to carry on the college work.

Now this question of deciding from among the applicants for admission to college who should be admitted, is a question that cannot be settled once for all, for all colleges, by any institution. To a considerable extent it is a local question which must be worked out locally, with local conditions in mind. Consequently in what I have to say, please understand that the results which have been achieved in Columbia College have been worked out with the kind of staff that we possess and the kind of education which we wish to present, very clearly before us.

Now I think that you will agree that there are three main categories into which the question of admission to college may be divided. In the first place, there is the question of general intelligence: Is the young man in question of sufficient general intelligence to profit by a college education? Then there is the question of specific training: Has the candidate covered the specific preparatory school work which will enable him to pursue the college work effectively? The third question concerns the character of the candidate: Is the individual a person who can safely be trusted with an education; the kind of person on whom a college cares to spend its time?

The method of college admission before the war consisted almost entirely with the consideration of the second point; namely, that of specific accomplishment. In Columbia College, as in half a dozen other colleges, the only method of admission before that time was by entrance examinations; and these entrance examinations in the old days seemed to attempt to test every scrap of information or alleged learning that the student had covered from the time he entered the preparatory school until he came up for admission to college. The whole ground must be covered. But there was no attempt made further than what would automatically be made by this set of examinations to find out anything about the general intelligence or the character of the candidate. Now the question arises as to whether any set of content examinations, either a few comprehensive examinations or eighteen or twenty separate examinations, provide a test of general intelligence for carrying college work. If an institution finds that all of the boys or an overwhelming proportion of them, who pass the entrance examinations, continue in college and do first rate work, then the question



will be answered in the affirmative. I may say that before we put into operation the system of admission which involves the intelligence test or psychological examination, our shrinkage on account of poor scholarship varied from twelve to about eighteen per cent during the course of and at the end of the freshman year. Since we have given tests of general intelligence we have fallen to five or six per cent of shrinkage on account of poor scholarship. So it seems to me that if we look that situation squarely in the face it is pretty clear that the usual set of entrance examinations does not answer the questions as to whether a person has general intelligence or which persons will profit most effectively by a college education. And I think we will also agree that a set of examinations does not tell us very much about the young man's character. It does not indicate that he has qualities of loyalty, industry, leadership and integrity.

I wish now to say a few words about the intelligence examination itself. Just what does that show us?

Now, the general intelligence test, the three-hour Thorndike test, which is the one that we use, certainly does not test character any better than does the old system of entrance examinations. If a boy is lazy, that fact is not detected by any kind of written examination. But it does tell us this. In the regular routine of my office I see personally each year ten or fifteen per cent of boys who are admitted to college who have the highest record on the intelligence test. I call them in to talk with them. They are not aware of the reason for their summons, and I am sure they are usually quite puzzled to know just what I am talking about. Now, not all those boys are doing first-class work. But I have followed that group for five years, and it is a fact that in every single case during that five years, when a young man has appeared high up on the list in the intelligence examination, if he has not been in the corresponding position in scholarship in his class, there has been some reason which may be assigned by those who know him best, which accounts for the situation. Either he is working too hard for his support, he is lazy, or he is athletic minded, or something of that kind. That is to say, although the intelligence test does not test qualities of character, it helps us to determine them.

Furthermore, the intelligence test seems to give us a more accurate prognosis of college accomplishments in the upper range and in the lower range than it does in the middle range. For

example, students at Columbia College who entered four and five years ago who took the intelligence test, were candidates for the honorary society of Phi Beta Kappa last June and the previous June. These elections, of course, took place without any knowledge whatever on the part of those who were making the election of Phi Beta Kappa, in regard to the standing of those students on the psychological test. But as a matter of fact, between sixty-five and seventy per cent of those who made Phi Beta Kappa were among the highest ten per cent on the psychological examination they took four years before.

Furthermore, in the lower range of the class the reasons that a young man may be in heavy going in his academic work are, as you know, very numerous. It involves financial difficulty, it involves trouble at home, it involves all kinds of things, some of which are within the student's power to remove, and some of which are not. But as a matter of fact, the young men who are low in their academic records are usually also low on their psychological examination.

Furthermore, we have kept very accurate records of the correlation between the mental test and the college accomplishment, and have found that for the students that we admit, the correlation is distinctly higher than that between the entrance examinations and college accomplishments, and distinctly higher than the correlation between the preparatory school records and college accomplishments. These figures have been practically invariant during the several years in which we have been trying this experiment.

The intelligence test not only fails to tell us very much about the character of the young man, but it does not tell us as much as we would like about his specific accomplishments. This last point is one on which I would like to say just a word. An institution that draws its students from various parts of the country must needs have dealings with many different preparatory schools in which the standards of accomplishment in the various departments are necessarily quite diverse. For instance, in the case of modern languages: if a student comes from a school which we do not know very much about, a school in which, perhaps, the teachers have been shifting more or less, it is utterly impossible for us to say that a certification from that school of two years' satisfactory accomplishment in modern language is the same as two years' satisfactory accomplishment in some other school. That

is to say, the difficulty which presents itself to all colleges which admit on certificate presents itself under our system.

Now, we have attempted to overcome this difficulty during the last two or three years by a system of so-called placement examinations. Perhaps I can illustrate by the case of English as well as anything else. I am speaking now, not about English literature and the appreciation of either poetry or prose, but merely about the mechanics of writing. It seems to me that the failure of a student to express himself clearly and concisely in English prose to the satisfaction of the examiner, may depend upon his inability to spell correctly, his lack of a sufficient vocabulary, his meagre command of grammatical construction, or it may be that even if he can spell and does have a sufficient vocabulary, and possesses a good command of the structure of the language, he cannot put a composition together in a workmanlike manner. So we have attempted to separate the placement examination into those four parts, so that each student, after he has been admitted to college on the basis of his intelligence examination and on the basis of his certification from his school, is asked to take a placement examination in English, in order that the weak spot, if there be one, may be isolated and proper steps taken to strengthen it. I think that it is almost essential to organize some plan of this kind in connection with a system which depends upon a general intelligence test and certification from school, if one is to keep the standard of accomplishment of the college where it should be, both in regard to homogeneity and to a general standard of excellence.

Now, in regard to the question of character, it is perfectly true that not every person of good character should go to college. A person may blossom forth with all the fruits of the spirit and still not be good college material. It is a pity. But we have a long way to go in getting an objective and clear estimate of character; for although we do our best to obtain accurate information on this point, it turns out that either the teachers and principals do not know the character of their students, or else they are exceedingly inaccurate in expressing a reliable estimate. At any rate, here is a field for study which deserves most careful and assiduous cultivation in order to find out whether we cannot devise some means of determining whether the young men who

are admitted to college and are given this careful and expensive education are the kind of persons who are most worthwhile.

The system, then, that I am describing is a system which does not depend on any one thing. It depends upon as careful an estimate of general intelligence as can be devised; it depends upon as accurate an estimate of specific training as we can obtain, and it comprises as careful an examination into the qualities of character that the young man possesses as we can make.

Now, the result of all this has been that during the last few years the quality of the student body has appreciably increased in excellence. We are able to make a more accurate prognosis as to what a young man will come to in his academic career than we ever could before.

It is important to observe that this whole method is somewhat experimental. But it is not an experiment which one can go off and leave running. We have to watch it closely all the time. There is, however, no doubt in the minds of those who have been responsible for it that it enables us to select our students much more wisely than we were able to before, and to solve all kinds of problems affecting not only the academic accomplishment, but the entire activity of our students in every field in college life. It should be said that the pressure for admission to college has been increasing during the last few years. We have about twelve or fifteen hundred applicants from whom we have to select about five hundred and fifty, a situation which did not exist ten years ago. So that under any system we undoubtedly would have gotten a better student body than we did then. At the same time, I think everyone concerned with the system feels that we are doing better than we possibly could have done under the old system.

I trust that you will forgive me for referring to the experience that we have had in Columbia College in regard to these experiments. It always seems trivial to refer to one's own experience, because it is so narrow; but after all, one's own experience is all one has had. And I always feel perhaps unreasonable prejudice in favor of talking about things that I know something about.

## DISCUSSION

DEAN HOWARD McCLENAHAN, Princeton University

There are some things which Dean Hawkes did not say concerning the work that he is doing at Columbia University which would have been of surprising interest to this gathering. I am going to attempt to steal some of his thunder and to tell what he is trying to do.

The intelligence tests have, of course, been instituted very largely through the authorities of Columbia University, who are doing admirable work with them. The tests are being used also with great satisfaction in a number of other places. If I may imitate this pioneer and talk a little of our own experience, you may be interested to know of one other effort we are making at Princeton in the use of these tests.

We have not as yet used them for admission; we are a bit conservative in that part of New Jersey and cling rather loyally to that which has gone before, and so we are still holding fast to the somewhat scornfully designated "content examinations"—the old written essay type of examination—but we are using intelligence tests as a guide in the determination of our treatment of men after admission.

As soon as the freshmen enter college, we hold a set of tests by means of which we attempt to determine their general intelligence rating, and from that time on what we expect of each freshman is pretty much fixed. If we find, for example, that a man has an "A" group rating, or first group rating, in the intelligence test, but is doing fifth group work, we call him up before us and say to him, "My son, we know more about you than you think. Now, you either get up or get out!" There is a certain sporting element involved and a certain trace of mystery about it which is very effective. He does not know just how much we do know, and we are careful not to tell him how little we know, but the painful sensation that, "perhaps they really do know something that I don't know that they know," is very effective. This admonition very seldom fails to bring forth good fruit in improvement in the character of the work done by the boy.

On the other hand, if we find that a man has a low intelligence rating, and that he is limping along, not getting much better results than would be expected, the rating gives us the opportunity

to commend him for whatever he is doing and to encourage him as far as we possibly can to make greater effort.

We have tried one other thing, and I think that in this Dean Hawkes is again the leader. We have introduced a type of test which might be regarded as a means of vocational guidance. About the middle of the sophomore year, we give another test designed not to measure a man's natural intelligence, but to determine his particular characteristics, his attainments, his tastes. We have found it very useful in guiding the man who had a little later to make a determination of his major subjects for the last two years. If anyone can devise any scheme of test which will enable more young men and more young women to determine wisely what their life work should be, and diminish in any way the number of heart-breaking mistakes, the administrative officers of the college are sure that he will confer a very real boom on the uneducated part of this country.

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In reply to a question by Dean Walden, Dean Hawkes replied that Columbia University had no intention of using the intelligence test as the sole means of admission to college, because it would not be the sensible thing to do.

Mr. George Walton (George School) inquired of Dean McClenahan whether the students who are tested after admission to college might not anticipate the use that might be made of the scores by administrative officers, and consequently be on their guard against getting results that would indicate the best of which they were capable. In reply, Dean McClenahan stated that every precaution was used not to let the student know what his intelligence rating was. Dean Hawkes remarked also that a group of entrants at Columbia who qualified for admission by passing the usual entrance examinations were given an intelligence test after matriculation. The evidence seemed to indicate that those who were taking examinations for the purpose of record and not as a means for qualifying for admission, did not show quite the same zeal as others.

In answer to an inquiry by Dean Julian Park (University of Buffalo), Professor A. L. Jones, director of admissions at Columbia University, stated that there was no difficulty in getting information from the schools as to the personality and character



of the candidate, but that the reliability of such information was another matter.

Dean Raymond Walters (Swarthmore College) then told of the confidential rating scale devised by Swarthmore as part of its entrance requirements. Such a confidential scale is sent out separately and is not attached to the regular school record. In his experience, the school principals have been surprisingly candid when the information was asked for on a separate sheet and have shown every desire to answer questions honestly and fairly.

*(b) The Freshman: Course of Study, Teachers, and General Guidance*

PROFESSOR C. MILDRED THOMPSON, Dean of Vassar College

I am aware that my thoughts about what the college expects of its freshmen are, like the remarks of every other speaker this afternoon, divided into three parts; but I did not know until Dr. Blackwell spoke, why it is that the tripartite influence is so strong upon us all. I suppose the one thing we remember, all of us, from our distant school days is Gaul and its divisions. You were so indulgent to Dean Hawkes in allowing him to speak from his experience, that I hope you will be equally tolerant of me because what I have to say is practically entirely limited to my own experience, and unfortunately, my experience is very limited. While I like to talk of matters that I know something about, I know very little. I have had this particular experience only a very short time, as I have been Dean of Vassar only little more than a year, and perhaps the newness of my job will account for any undue seriousness that I may put into the discussion of the question.

The subject we are asked to discuss is, "What the college expects of its freshmen." But I am aware that my remarks bear more upon what we want than upon what we actually get. In the first place, I should say that we must assuredly expect of freshmen a capacity to learn; in the second place, a willingness to learn, interest; and in the third place, certain mental habits that are conducive to learning in college.

Upon the first expectation, mental capacity, I shall say very little this afternoon, because I think that subject has been very



thoroughly discussed. We are all experimenting and are watching the experiments of institutions like Columbia that has gone far ahead in this field. I wish to add only a word or two from our experience at Vassar. We use the Columbia mental tests, not for entrance, because we have not been able to adapt them as yet to candidates who apply for admission from remote parts of the country. They are used after students are admitted to college and are given on the first day after the opening of college. For admission, we use what Dean McClenahan referred to as the "much despised" college entrance examinations. But the experience that we have had does not lead me to despise the College Board examinations, or to hold them as worthless as tests of mental capacity. We cannot hold them in contempt when we know that in the freshman class of last year, numbering over three hundred, not one was sent home for deficient scholarship in the middle of the year, and only eight at the end of the first year. That is a wreckage at the end of the first year of only two to three per cent. It must appear, therefore, that college entrance examinations, faulty as they are, tell us something, if not everything, about a student's capacity to learn.

The most troublesome and the most interesting problem now before us is not the capacity, but the willingness to learn. This is a difficulty upon which, it seems to me, we can work far more directly than we have in the past with school teachers and school principals. I do not know whether I join heartily with the other representatives of colleges who have said that we want a great deal more information about the students who are trying to get into college. We hardly know how to evaluate and use the information we now have. Yet this morning, it seemed to me that we saw a little gleam of light in the prospect of the sciences taking upon themselves the determination of moral character. If this desirable end is achieved, and if Dr. Caldwell's committee can develop scientific tests of moral worth, then those of us who are responsible for selecting students for college education will find our duties much less difficult than they have been, and more successfully fulfilled. I shall eagerly await experiments in that field. In the meantime we shall have to muddle along with our faulty estimates of character and value them as best we can.

But there is one quality of first rate importance which ought not to be difficult to describe or to evaluate. I am not now

referring to moral qualities, such as honesty—not lying, not stealing, not cheating—but to something very simple and basic, a willingness to work, willingness to use mental effort. I have been impressed this fall in the interviews that I have had with students with the lack of this willingness to work among freshmen who are having troubles of one sort or another. What I learn is that these young women are surprised and aggrieved at finding that they have to give quite a lot of time to work.

Where do their false ideas about college come from? Doubtless, we ourselves are largely responsible in making college appear as one vast playground. How many who come say that it is not study, but the life that brings them? And yet they are *students*, so-called, and the only reason by which they have any right to get into college is that they are willing to be students; and they have been students in some degree to get there, I know well. Why, then, should they expect to cease their labors of study as soon as they get safely inside the gates? I would say, therefore, that we have every right to expect of freshmen that they should be willing to work and work hard during a generous third of their twenty-four-hour day of work, play, rest.

The third thing that I think we have a right to expect of freshmen is good training in mental habits. We hear a great deal about preparation for college, and I know that the schools are constantly irritated, and I think rightly irritated, at the strangle hold that the colleges seemingly put upon them. The colleges tell their applicants that they must study just so much and so many subjects, and so on, and that they must be examined in certain ways; and it seems to the teacher in school as if there were no chance for teaching, no chance for education, no time for anything except to prepare for college. But if it is actually true that educating and preparing for college are mutually exclusive, then woe to the college. Certainly the college is the first to suffer, and suffers most acutely, if students come to us who have been prepared for college without education.

Recently our English Department, in co-operation with the departments of other colleges, has been inquiring from freshmen about their method of preparation for college in English. In the course of this inquiry the most horrible things have come to light in the emphasis placed on the examinations. There were a number

of students who described their last year in school as one continuous succession of examinations. The teacher tried out on them old College Board examinations, one after another. Now I cannot imagine anything more deadening to a student in the last year of school than that closing in of the horizon to everything except an examination. If we colleges are making the examination as the essential focus of preparation for college, the sooner we know it and stop it the better. It is killing everything we want. Perhaps I should have said before you had a chance to express your approval that I personally do not think that this ugly process is a necessary result of examinations. I believe in examinations and I do not want to give them up for admission to college. I do not want to give them up after students get into college. In fact, we are now working towards something in which other colleges have been pioneers: more examinations—a general examination at the end of our course. We apparently test educational results from schools and then we sit calmly by with no one to see whether we are educating or not. We are not even testing ourselves or checking up our own results. I agree very directly with something that was said this morning, that there has been a great deal more advance in methods of teaching in schools in the last ten to twenty years than in methods of teaching in colleges. In this mood of humility I would not have you think that all of the inadequacies that we find in college students are chargeable to the schools. Please do not think that we in the colleges are satisfied with our own results. We do not know them, and I think that is the worst possible confession to make, in many ways.

One of the essentials in the preparation of any student is that he or she should be willing to use his or her mind, to think, to know how to think, and to be willing to think, and possibly, to enjoy thinking. We who teach freshmen find very often that much of our effort in the first weeks must be spent in breaking down a habit of dependence on the teacher. I have found many students who come to college with a certain habit that I would call resting on the teacher's face: and perhaps a number of the teachers present know what I mean. That is, the student is not willing to trust what she knows or what she may think; she will go just as far as your expression gives her courage, and if you look a little bit dissatisfied, instead of going further she tries something else, anything to please the teacher. That isn't any

kind of mind to work with; that is not the kind that goes to college for education. Please do not think that I complain because it is not educated. It is not that we want finished people to come to college. If they were completely trained then there wouldn't be anything for us to do. We want them if they can think and are willing to think, if they are free in the use of their minds.

Another more specific kind of training that we have a right to expect is that which enables a student to work over a fairly large field at a time, something beyond the lesson for the day. This constitutes one of the problems that we find most difficult in the first year of college. Some students think it absurd when we speak of the freedom of the freshman year, and yet there are far more of them who are bewildered by the amount of freedom that they have than there are those who know how to use it. We might get farther on, schools and colleges together, if there were something more of the kind of training which makes a student responsible for work over larger assignments than merely a day's task. For this I do not think it makes any particular difference whether the training is given in English or in science or in foreign language or in history. The more I work with students in college and the more I become informed upon the problems of schools the less profound interest I have in special subjects. I like them all and I would hate to give up anything that we have and I would like to have a great deal more of a number of things that we now have in small quantities, like science and history; and yet I would not want any more subjects required. That is my perplexity. And this is one reason why I am not ready to speak on this second subject; the course of study for the freshman year. I am quite bewildered in my own mind as to what may be best. I hope to get some enlightenment before the afternoon session is over.

Primarily, then, the things that I would want to have and the things that I think colleges have a right to expect of freshmen are a willingness to work; a sense of joy in mental as well as physical exercise; and a certain degree of independence and freedom in the use of their minds.

A college that I know something about received a letter the other day from a parent of a student who is registered for admission to this college, in which the parent asked if it were

true that certain members in this faculty had voted for a political party which I shall not name. And if it were true, the parent continued, she didn't wish to send her daughter to this college because she did not wish to expose her to dangerous ideas. If it had been my privilege to reply to that letter, I should have answered that a college would expect its students to have enough mental hardihood to stand exposure to intellectual draughts of all sorts and kinds, the more the better. We ought to have in the colleges the winds of thought blowing in from all sides. If a student is accustomed to a thoughtful examination of facts and ideas she will proceed unharmed amid a host of influences, good and bad, in the direction of stout mental health and growth.

*(c) The Freshman: His Course of Study, His Teachers, and His General Guidance*

PERCY T. WALDEN, Acting Dean of Freshmen, Yale University

In speaking on this subject I know you will wish me to draw my material from my own experience with freshmen. This has been wholly at Yale and has covered a period of some twenty-five years. During the last four of these years I have been closely associated with the experiment of administering the freshman class as a separate school of the university. This experiment embodies so much of our theory, tempered by trial and experience, that I feel I can convey to you my convictions on the subject assigned to me in no better way than by explaining what we are trying to do and how it works out.

My own part in this Yale experiment has been merely that of co-worker. Dean R. P. Angier has been the leader, and to his wisdom, tact, and judgment any success that has been achieved is entirely due.

Immediately after the war an insistent demand from our alumni made itself felt that the traditional sharp lines of demarkation between the schools of Science and Liberal Arts should be broken down. They wished the undergraduates to think of themselves first of all as men of Yale. At that time conditions were favorable to changes and it was relatively easy to put into operation a scheme which many of us had cherished for years.

The entering freshmen were assembled in one class organized as a separate school under a dean and faculty of its own, with the same powers and privileges as those of other schools. This new school aims, first, to secure excellent teaching; second, to maintain solid standards of scholarship; third, to offer fundamental subjects of study, and fourth, to give as much personal attention to freshmen as is feasible and desirable. Perhaps I cannot present the picture better than by discussing these aims in detail.

*Teaching.* Since freshman subjects are, in general, more elementary and do not call for such advanced scholarship, a practice had grown up of allotting to this work the younger and less experienced members of the teaching staff. We deliberately set out to change this practice and to choose our freshman teachers from the ranks of those who had proved their worth in the classroom by their actual success. As far as possible we demanded of departments that teachers should first be tried and approved in the upperclass schools before they were promoted to teach in freshman year. In this selection, while scholarship and research are highly appreciated, they are not necessarily controlling factors. Teaching success as shown in the ability to inspire a class must weigh heavily in making our choice. We are content for the present to throw the emphasis strongly on this teaching side and trust that in the inspirational atmosphere of the University, scholarly effort will not be wanting.

The first year of our experiment attracted to the work a most impressive group of gifted teachers, who made their influence felt from the start. A spirit of interest in things intellectual and of earnest purpose showed itself among the students at once, which contrasted favorably with our previous experience.

In keeping up this high teaching standard we are, however, faced with a real dilemma. The attractions of the scholarly life, the rewards of research loom large before the young and ambitious instructor, but too close absorption in research drains the teacher's energy to the point where he lacks the enthusiasm that inspires his class. A nice balance must be maintained. The call to service as an educator must be emphasized and the teacher must feel sure of his backing and his reward. We must make good our promise to reward teaching service and do so in the face of budget pres-



tures and the desire of departments to divert their funds to research men whose names and accomplishments are a more showy advertisement.

*Solid Standards of Scholarship* among undergraduate students mean to us a standard rigorous enough to call for steady, consistent effort from day to day on the part of most students, but not so high that an average boy would be expected to cut himself down to his studies only and have no leisure for sports, exercise, and the contact with his fellows, which is so large and important a factor in our American college life. Many will argue that the business of a college being intellectual, all else is too trivial to demand serious consideration and, therefore, we are making an undue allowance for so-called extra-curriculum activities. Without going into this question let me point out one condition which faces us and must be reckoned with, namely, that about half of our students are self-supporting, at least in part, and must use the leisure time allowed them in lucrative employment, in order to earn the money to continue their education.

We have found in practice that the best spur to the laggard and the strongest incentive to the ambitious is a standard of moderate rigor based on a perfectly attainable amount of work, coupled with just, equable, and inevitable enforcement of dropping rules.

Daily work is our basis of judgment. Examinations are regarded as furnishing supplementary evidence which the instructor is free to weigh as heavily or as lightly as he deems wise. The instructor is the sole arbiter of the mark which is his measure of the student's attainment. In order to make our marks as uniform as possible, Departments of Study hold conferences and discuss comparative attainments before reporting. At the end of each term curves are plotted for each subject and also for the average of the class as a whole, and these are sent to each instructor. Every effort is made to help translate into reliably comparable figures the expression of the student's achievement. Again, our system of quality credits is simple and not exacting. It requires a mark of 75 in one-third of the work of the year. This does, however, furnish an index, for in practice we find that no student who does not get his quality credits proves worthy of consideration on other counts.



Figures are not always convincing but we derive some comfort from the showing of the past four years. Whereas in 1920, 16.1 per cent of the class were dropped during the year, this percentage of loss has gradually been reduced to 10.9 per cent in 1924. In this interval of time the realization had been strengthened in the students' minds that poor work would inevitably be followed by punishment. I have never been associated with a faculty that more rigorously insisted on no favorites and no exceptions. Their ideal is a perfectly attainable standard rigorously enforced.

*Subjects of Study.* To find a curriculum suitable alike for those proposing to be candidates for a degree in liberal arts, B.A. or Ph.B., and also in science and engineering, B.S., was a problem of no little difficulty to the committee which had the matter in charge. Outside it was rather generally assumed that a common Freshman Year meant a common curriculum, but this was, of course, neither possible nor desirable. There is a common basis in the requirement that all students shall take English (literature and rhetoric) and History (a comprehensive course in the history of western civilization). In addition, three other studies must be chosen under certain restrictions. These choices quite naturally adapt themselves to the degree sought. For example, a classical student usually takes Latin, a modern language, and a science or mathematics; a student of science, chemistry, mathematics, and a modern language; a candidate for Ph.B. might take a science, a modern language, and Social Science; whereas an engineer would always include mechanical drawing among his subjects.

A very fundamental question which is squarely before us as educators, not only in New Haven, but everywhere, is how far the modern trend toward so-called orientation courses should be carried. Columbia's notable contribution to this field with the course in Contemporary Civilization has so impressed and inspired us all that I sometimes fear we may go too far. Our Freshman History course has been deliberately constructed on orientation lines. Courses like English literature and Latin have a strong trend in the same direction. The urge to introduce a combined course in the physical sciences which deals with what science teaches rather than the study of the principles of a science is almost irresistible. The modern languages and mathematics have

so far escaped the contagion, but how long will they be allowed to continue in the old-fashioned way?

We have a new course which I regard as a most interesting contribution to this field. It is called "Introduction to the Social Sciences," and is now offered as an elective. It is still in an experimental stage but gives great promise if we can find room for its proper expansion. "It deals with the nature and development of the ways by which men have succeeded in living together in families, tribes, and nations; the evolution from simple, customary actions of such complicated institutions as industrial organization, property, marriage, and government." Professor Keller, of the Department of Sociology, is the instigator and sponsor of this experiment, and he has associated with him and enthused with his spirit a group of exceptional teachers from several other departments. This unusual cutting across departmental lines brings a many-sided point of view to the faculty discussions.

*Choice of Degree.* In the old days a freshman came to us with his mind already settled as to the degree for which he was to become a candidate. He entered either the College, Academic Course, or the Sheffield Scientific School. Often, however, this too early and irrevocable choice was ill advised and unfortunate.


In the common Freshman Year we have greatly improved this situation by the so-called system of "deferred choice." While we encourage those students whose bent is sufficiently pronounced to justify an early choice of course, believing that a well founded and determined purpose is an important factor in education, we advise the uncertain boy to give more time and careful consideration to the matter. No freshman is required to announce the degree for which he will become a candidate until he has nearly completed his first year. This provision makes it possible for a student to change his decision for any sound reason without a crippling handicap.

*Personal Attention.* Our freshmen come to us from many localities and from many types of schools; in consequence their viewpoints are almost as various as the individuals. Our problem of personal attention in consequence presents some difficulty, and we feel that it can be met only by an intimate personal contact of instructor and student. We have, therefore, established a system

of volunteer counselors recruited from the ranks of those instructors with whom the student is brought in contact in the classroom. About fifteen freshmen are assigned to each counselor, who becomes their official adviser and friend. These assignments are made as promptly after the opening of college as possible. The counselor makes his own advances, perhaps inviting the student out to dinner at his home, perhaps taking him to the theatre, or breaks the ice in some other way. If this contact is successful, most satisfactory and helpful relations are established, and these often carry unofficially through the whole four years. The counselor is apt to regard the student as his ward and to act as his advocate before the Faculty if occasion arises. In any event, he helps him in deciding upon his course of study, advises about extra-curriculum activities, and points out the pit-falls that may beset his way.

In concluding, let me call attention to a factor in our work which I am convinced has had a material influence on the success of the whole. We have striven to establish in all subjects of study divisions of less than twenty-five men. Large lecture courses have been eliminated except where they form an adjunct to science classes for demonstration purposes. This system of small divisions has had an influence on the success of the work second only to the personality of the teacher. So sharp has been the contrast that some small divisions under less experienced men have succeeded better than larger divisions under men of greater experience.

With good teachers, handling small units, a well devised curriculum, and reasonable standards strictly lived up to, I believe that we can give our freshmen a start in college life that will carry them far toward a rounded education.



### DISCUSSION

During the discussion that followed the papers, Miss Chandor inquired of Dean Thompson whether there might not be an explanation of the unwillingness of some girls to work in the dullness of the freshman year. They complain frequently that the course seems to have nothing to do with life, that the required subjects are all backward looking subjects and that often the poorest teachers are assigned to freshmen. Miss Chandor suggested the advisability of requiring of first-year students one of the general courses in orientation, such as are taught at Columbia, or in Economics; and the assignment to them of instructors who were conspicuously good teachers rather than research workers.

In reply Dean Thompson stated that in her experience the freshmen did not take advantage of such freedom as was given them to elect new subjects; that they were influenced by the schools to continue the subjects in which they were interested; that some were too timid to attempt the unknown. She added that it was a cause of regret that there were not more excellent teachers for all years of the college course.

Upon being asked how Yale College measured success in teaching when assigning instructors to the freshman year, Dean Walden said that they used the direct evidence coming from students and also studied the teacher in action.

It was also suggested that the small number of failures among freshmen at Vassar might be attributed to the success of the entrance examinations, the speaker citing the case of a Middle Western university, admitting upon certificate, that had dropped four hundred freshmen at the end of the first term.

## BUSINESS MEETING

Annual Report of Stanley R. Yarnall, Treasurer of the Association  
of Colleges and Preparatory Schools of the Middle States  
and Maryland for the fiscal year 1923-24

## DEBIT

Balance from year 1922-23, November 28, 1923.....	\$1,472.29
Four checks for Annual Dinner 1923 at \$2.50, received after settlement was made.....	10.00
Dues from 279 institutions for 1923-24.....	2,092.50
Balance due from one institution for 1923-24.....	5.00
Dues from three institutions for 1924-25.....	22.50
Interest on deposits.....	42.61
	<hr/>
	\$3,644.90

## CREDIT

Expenses for Annual Conference, 1923.....	\$255.61
Printing .....	814.53
Salaries .....	300.00
Postage and office expenses.....	65.00
Travel of officers, Executive Committee, Delegates and members of Commissions.....	330.07
	<hr/>
	\$1,765.21
Balance in the hands of the treasurer on Nov. 28, 1924	1,879.69
Total as above.....	3,644.90
On deposit with Girard Trust Company, Philadelphia, November 25, 1924, as per their statement sub- mitted herewith .....	1,879.69

Three institutions are in arrears for the dues of 1922-23 and 1923-24. Four institutions are in arrears for the dues of 1923-24 only.

The By-Law providing that institutions that have not paid their dues for three consecutive years be automatically dropped from membership has not had to be enforced this year against any institution.

(Signed) STANLEY R. YARNALL,  
*Treasurer.*

### REPORT OF THE AUDITING COMMITTEE

We have examined the account of the treasurer as summarized above, and the accompanying vouchers, and find all to be correct as set forth, the balance in his hands being \$1,879.69.

VALENTINE L. CHANDOR,

WALTER R. AGARD,

*Auditors.*

November 28, 1924.

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### REPORT OF THE EXECUTIVE COMMITTEE

During the course of the year the following institutions were approved for admission to membership in the Association:

Board of Education, Methodist Episcopal Church, 150 Fifth Avenue, New York, N. Y.

College of the Sacred Heart, Manhattanville, Convent Avenue, New York, N. Y.

Eastern High School, Washington, D. C.

Gettysburg Academy, Gettysburg, Pa.

Immaculata Seminary, Washington, D. C.

New Brighton High School, New Brighton, Pa.

Pennsylvania College for Women, Pittsburgh, Pa.

Roberts-Beach School, Catonsville, Maryland.

Wesley Collegiate Institute, Dover, Delaware.

The high schools at Hackensack, New Jersey; Middletown, Delaware; and Princeton, New Jersey, resigned from membership, and we lost also Miss Hill's School, Philadelphia, and the Cutler School, New York City, which have been discontinued. Buffalo Seminary, Buffalo, New York, having been reorganized, was readmitted to the Association.

The Executive Committee considered the suggestion made by the Commission on Secondary Schools that the name of the Association be changed to read, "The Association of Colleges and Secondary Schools of the Middle States and Maryland," instead of "The Association of Colleges and Preparatory Schools." In the opinion of this Committee, the functions of the Association have broadened somewhat since it was first established, so that the

reference to the schools might more properly be made in the form of secondary schools. The Committee approves that recommendation and submits it to the Association for action.

GEORGE WM. MCCLELLAND,  
*Secretary.*

Upon motion the report of the Committee was accepted and the Secretary was instructed to cast a ballot in favor of the recommendation for the change in name.

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### REPORT OF THE COMMISSION ON HIGHER INSTITUTIONS

PROFESSOR ADAM LEROY JONES, Chairman

*Mr. President and Members of the Association:* The Commission had before it for consideration this year a number of applications for infusion in the approved list. There was evidence of great progress on the part of some institutions which could not yet be approved by the Commission, and we have also received evidence of very great improvement in a number of colleges formerly placed upon the approved list with the minimum of attainment. Two institutions from among those applying have been added to the approved list this year: Pennsylvania College for Women, in Pittsburgh, and St. Bonaventure's College, in Allegany, New York.

A year ago the Association instructed the Commission to proceed to review the cases of colleges on the approved list, in accordance with the practice common to such organizations. The Commission will send out within the next few weeks blanks to each of the colleges now on the list, asking that up-to-date information be furnished regarding the way in which the standards are met. As a part of that inquiry, information regarding the credentials of candidates for admission will be asked for in considerable detail.

The Commission is fortunate in having the support of the Carnegie Foundation in this matter. Some of you may have seen the reports of a similar study made by the Foundation in connection with the Southern Association in 1921, and with the State of Massachusetts last year.



## THE REPORT OF THE COMMISSION ON SECONDARY SCHOOLS

SECRETARY McCLELLAND

*Mr. President and Members of the Association:* The Chairman of the Commission, Dean Reavis, of Pittsburgh, is unable to be here today and has asked me to make an informal report of progress.

Early in the year a full meeting of the Commission was held which was also attended by representatives of the state departments of all five states comprised within the territory of the Association. At that time there was considerable discussion of means by which to procure the information necessary before proceeding to draw up a list of approved schools. Owing to the illness of the Chairman, which has lasted for several months, the Commission has been unable to carry on its work, but Dean Reavis now has plans for the future about which I have not details. He has made a further request that the Association appropriate from \$1000 to \$1200 for the necessary expenses connected with the work of the Commission during the coming year. This request was considered informally by the Executive Committee, and it was felt that the Committee could not make a definite recommendation to the Association until it had further information. I present Dean Reavis' request, however, for your consideration.

Upon motion the request was referred to next year's Executive Committee with power to act.

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## THE REPORT OF THE COMMITTEE ON COLLEGE ENTRANCE CREDITS IN PUBLIC SPEAKING

PROFESSOR W. O. SYPHERD, University of Delaware, Chairman

In accordance with the instructions from retiring President Farrand of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the undersigned committee has considered the question of College Entrance Credit for Public Speaking.

Two meetings of the committee were held at Columbia University, the first on June 6th and the second on November 13th.

At the first meeting, the committee entered into a general discussion of the problems involved, considering the following aspects of the subject:

1. The nature of the subject, which, it was agreed, might be defined as The Theory and Practice of Oral Expression, including such divisions as Oral Reading, Declamation, Extemporaneous Speaking, Prepared Original Speeches, Debate, Parliamentary Law, and Dramatics; and involving instruction in such matters as phonetics, articulation, use of voice, posture, gesture, in addition of course, to comprehension of subject matter.

2. The importance of the subject in school, college, and after-life—there being no difference of opinion among the members of the committee as to the great importance of the subject.

3. The kind of work for which credit might be allowed; and

4. The nature of the test of the quality of the work—these two topics receiving at the time only cursory consideration, the committee having been informed that a report on the subject from a committee representing the National Association of Teachers of Speech would probably be available in the early autumn, a report which it was felt would be of great assistance to your committee.

5. The amount of possible credit and relation to other credits now given—the general opinion being that the amount of credit should not exceed one unit.

6. The possibility of Entrance Board Examinations—a matter on which it was admitted by the members of the committee that no report could be made to the Association at this time, other than a mere declaration that this is a matter which would rest entirely with the College Entrance Board and with those colleges which offer College Entrance Board Examination.\*

At its second meeting, the Committee was fortunate in having before it the syllabus on College Entrance Credit Courses in Public Speaking and Oral Expression which had been prepared by a Committee representing the National Association of Teachers of Speech. Advance copies of this syllabus, which will be pre-

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\*Since this report was written, the chairman of the Committee has received from the Secretary of the Committee of Review of the College Entrance Examination Board the following statement: "The Committee of Review is of the opinion that public speaking is not a subject in which the College Entrance Examination Board under its present plan of organization could hold an examination."

sented to the National Association of Teachers of Speech at its December meeting, have been very generously made available for consultation by members of this Association at the present meeting.

On the basis of this syllabus and of additional information which has come into the hands of the Committee, the Committee feels justified in presenting the following statement as to existing conditions in the general field of Oral Expression:

1. The subject is recognized as a worthy subject of instruction, both by many colleges and by many preparatory schools.

2. The courses which are now given in many preparatory schools are either now on a par with other academic subjects or would shortly become so, if colleges should more generally recognize the subject as worthy of credit.

3. Many colleges now allow entrance credit for the subject, the amount of credit and the decision as to whether or no any credit be allowed depending on the knowledge which the college has of the nature of the work in each school.

4. The amount of credit allowed varies between one-half unit and one unit.

Even in the light of the foregoing conditions, and of other information as to nature of courses, tests, etc., the Committee feels that it is not in a position to make specific recommendations as to content, time, examinations, and amount of credit. The Committee offers to the Association, however, a general recommendation embodied in the following resolution:

*Resolved:* That the Association of Colleges and Preparatory Schools of the Middle States and Maryland recognizes the great importance of the subject of Oral Expression and recommends at this time that colleges which admit by certificate shall consider seriously the granting of college entrance credit to the amount of one-half or one unit to those schools which are able to satisfy Committees on Admission that the courses in Oral Expression given in those schools are in content, time, and strictness of requirement, on a par with other subjects for which credit is now allowed.

Respectfully submitted,

*The Committee on College Entrance Credit  
for Public Speaking.*

November 28, 1924.

After the motion was seconded there was some discussion in which Dr. Swetland (Peddie School) stated that he had sent out a number of letters of inquiry to preparatory schools and had received twenty-four replies, all but two of which were in favor of having entrance credits given for courses in Public Speaking properly organized in the school. The recommendation was carried unanimously and the Committee discharged.

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#### NEW BUSINESS

*Mr. Howard Dutch* (Montclair High School) presented the following resolution for the approval of the Association:

*Resolved:* That it is the sense of the Association that the number of college entrance units remain as at present, of which the prescribed units shall not exceed twelve, the remaining units being allowed in marginal subjects defined and approved by the College Entrance Examination Board.

In the discussion which followed, President Ferry pointed out that the College Entrance Examination Board limits its function to entrance examinations, and does not determine what subjects shall be proper for admission to college. A substitution motion was then made and carried, referring the whole matter to a committee of five to be appointed by the President to report to the Association at the next annual meeting as to whether or not it was prepared to endorse the resolution and recommend it to the Association.

*Headmaster Sharpe* (Blair Academy) spoke of the desirability from the point of view of the secondary schools of allowing four entrance credits in English when the school course in English had covered four years at five periods a week. The matter was referred to the Executive Committee for consideration.

*Miss Valentine Chandor* (Miss Chandor's School) moved that a questionnaire be sent out to the members of the Association to find out whether the first Friday and Saturday in December would be a more convenient time of holding the annual convention than the present Thanksgiving recess. After being seconded and discussed, the motion was amended, striking out the dates, and

substituting the phrase, "some other dates." The amended motion was lost by a close vote.

The report of the Nominating Committee was then received and the Secretary was instructed to cast a ballot in favor of the names suggested in the report. The nominees were declared elected. The President then read the following appointments:

Representatives on the College Entrance Examination Board:

Mr. WALTER MARSH, St. Paul's School,

Dr. RICHARD GUMMERE, Wm. Penn Charter School,

Mr. RALPH FILES, East Orange High School,

Headmaster WILLIAM MANN IRVINE, Mercersburg Academy.

Principal ELIZABETH F. JOHNSON, Baldwin School.

Delegates to the Conference on Uniform Entrance Requirements in English:

Professor FRANCIS STODDARD, New York University,

Mr. L. WARDLAW MILES, Gilman Country School,

Professor GEORGE WM. MCCLELLAND, University of Pennsylvania.

Upon motion the meeting then adjourned.

## LIST OF MEMBERS, 1924-1925 \*

INSTITUTION	LOCATION	HEAD OF INSTITUTION
Academy of the New Church...	Bryn Athyn, Pa.....	N. D. Pendleton, D. D.
Adelphi Academy.....	Brooklyn, New York..	Eugene C. Alder
Adelphi College.....	Brooklyn, N. Y. (Clif- ton Pl. & Lafay- ette Ave.).....	Frank D. Blodgett
Agnes Irwin School.....	Philadelphia (2011 De- lancey Pl.).....	Josephine A. Natt
Albany Academy.....	Albany, N. Y.....	Islay F. McCormick
Albright College.....	Myerstown, Pa.....	C. A. Bowman
Alcuin Preparatory School.....	New York City (11½ West 86th Street)...	Grace H. Kupfer and Blanche Hirsch
Alfred University.....	Alfred, N. Y.....	Boothe C. Davis, Ph.D.
Allegheny College.....	Meadville, Pa.....	
Allentown Preparatory School...	Allentown, Pa.....	Frank G. Sigman
Armstrong Manual Training School.....	Washington, D. C.....	Arthur C. Newman
Arnold School.....	Pittsburgh, Pa.....	Charles W. Wilder
Baldwin School.....	Bryn Mawr, Pa.....	Elizabeth F. Johnson
Baltimore City College.....	Baltimore, Md.....	Wilbur F. Smith
Baltimore Polytechnic Institute.	Baltimore, Md. (North Ave. & Calvert St.)	William R. King, U. S. N.
Barnard School for Boys.....	New York City (721 St. Nicholas Ave.)...	William L. Hazen
Barnard School for Girls.....	New York City (421 W. 148th St.).....	
Barringer High School.....	Newark, N. J.....	Wayland E. Stearns
Beard School.....	Orange, N. J.....	Lucie Beard
Bennett School.....	Millbrook, N. Y.....	May F. Bennett
Berkeley Institute.....	Brooklyn, N. Y. (185 Lincoln Place).....	Ina C. Atwood
Berkeley Irving School.....	New York City (309 W. 83d St.).....	Lewis Dwight Ray, Ph.D.
Bernardsville High School.....	Bernardsville, N. J....	D. Fred Aungst
Birmingham School for Girls...	Birmingham, Pa.....	A. R. Grier
Blair Academy.....	Blairstown, N. J.....	John C. Sharpe
Blue Ridge College.....	New Windsor, Md....	J. M. Henry
Bordentown Military Institute..	Bordentown, N. J....	Col. Thompson D. Landon
Boys' High School.....	Brooklyn, N. Y.....	Arthur L. Janes
Boys' High School.....	Reading, Pa.....	John H. Frizzell
Brearley School.....	New York City (60 East 61st St.).....	Gordon N. Northrop
Brooklyn College Preparatory School.....	Brooklyn, N. Y. (1125 Carroll Street).....	John M. Jacobs, S. J.
Brooklyn Heights Seminary.....	Brooklyn, N. Y. (18 Pierrepoint St.).....	Florence Greer
Bryn Mawr College.....	Bryn Mawr, Pa.....	Marion E. Park
Bryn Mawr School.....	Baltimore, Md. (Cath- edral & Preston Sts.).....	Edith Hamilton
Bucknell University.....	Lewisburg, Pa.....	John H. Harris, D.D.
Buffalo Seminary.....	Buffalo, N. Y.....	L. Gertrude Angell
Bushwick High School.....	Brooklyn, N. Y. (400 Irving Ave.).....	Milo F. McDonald
Camden High School.....	Camden, N. J.....	Clara S. Burrough
Canisius College.....	Buffalo, N. Y.....	Peter Cusick, S. J.
Cascadilla School.....	Ithaca, N. Y.....	Christopher A. Conner
Castle (The).....	Tarrytown, N. Y.....	C. E. Mason (Miss)

\*Members are requested to send the Secretary notice of any changes to be made in this list. The only degrees printed are those of the doctorate, in order to insure correct addressing.



INSTITUTION	LOCATION	HEAD OF INSTITUTION
Cathedral School of St. Mary...	Garden City, N. Y....	Miriam A. Bytel
Catholic University of America..	Washington, D. C....	Thomas J. Shahan, D.D.
Centenary Collegiate Institute..	Hackettstown, N. J....	Robert J. Trevorrow
Central Commercial & Manual Training High School.....	Newark, N. J.....	William Wiener
Central High School.....	Harrisburg, Pa.....	Walter E. Severance
Central High School.....	Philadelphia (Broad & Green Sts.)....	John L. Haney, Ph.D.
Central High School.....	Washington, D. C....	Alvin W. Miller
(Miss) Chandor's School .....	New York City (137 E. 62nd St.).....	Valentine Chandor
(Miss) Chapin's School.....	New York City (32 E. 57th St.).....	M. C. Fairfax (Miss)
Chester High School.....	Chester, Pa.....	George W. Pedlow
Chestnut Hill Academy.....	Chestnut Hill, Pa.....	T. R. Hyde
Colgate University.....	Hamilton, N. Y.....	Elmer Burritt Bryan, LL.D.
College of the City of New York.....	New York City.....	Sydney Edward Mezes, Ph.D., LL.D.
College of the Sacred Heart.....	New York City (Man- hattanville, Convent Ave.).....	Mother Brownson
College of Mount St. Vincent...	On-Hudson, New York City.....	Sister Josephine Rossaire
College of New Rochelle.....	New Rochelle, N. Y....	Rev. Mother Ignatius
College of Saint Elizabeth.....	Convent, N. J.....	Sister Mary Pauline
Collegiate School.....	New York City (241 W. 77th St.).....	Arthur F. Warren
Colonial School for Girls.....	Washington, D. C. (1539 18th St.).....	Jessie Truman
Columbia Grammar School....	New York City (5-7-9 W. 93rd St.).....	Frederic A. Alden
Columbia High School.....	South Orange, N. J....	J. H. Bosshart
Columbia University.....	New York City.....	Nicholas Murray Butler, LL.D.
Cornell University.....	Ithaca, N. Y.....	Livington Farrand
Dearborn-Morgan School.....	Orange, N. J.....	A. M. Aroline
DeWitt Clinton High School....	New York City (59th St. & 10th Ave.)....	Francis H. J. Paul
Dickinson College.....	Carlisle, Pa.....	James H. Morgan, Ph.D.
Dickinson Seminary.....	Williamsport, Pa.....	John W. Long
Donaldson School.....	Ilchester, Md.....	Herbert S. Hastings
(Mrs.) Dow's School .....	Briarcliff Manor, N.Y.	Edith C. Hartman
Drew Seminary.....	Carmel, N. Y.....	Clarence P. McClelland
Drexel Institute.....	Philadelphia, Pa.....	Kenneth Matheson, LL.D.
Dunbar High School.....	Washington, D. C....	Mr. Wilkinson
D'Youville College.....	Buffalo, N. Y.....	Mother Saint Verecunda
Eastern High School.....	Washington, D. C....	Charles Hart
East High School.....	Rochester, N. Y.....	William Betz
Eastern District High School...	Brooklyn, N. Y. (Mur- cy Ave. & Kep St.)..	William T. Vlymen, Ph.D.
Eastern High School .....	Baltimore, Md.....	E. J. Becker, Ph.D.
(Misses) Eastman's School.....	Washington, D. C. (1305 17th St.).....	Miriam M. Eastman
Easton High School.....	Easton, Pa.....	W. C. Davis
East Orange High School.....	East Orange, N. J....	Ralph E. Files
Elizabethtown College.....	Elizabethtown, Pa....	J. G. Meyer
Elmira College.....	Elmira, N. Y.....	Frederick Lent
Emerson Institute.....	Washington, D. C. (1740 P St., N. W.)..	W. H. Randolph
Emma Willard School.....	Troy, N. Y.....	Eliza Kellas, Ph.D.
Episcopal Academy.....	Overbrook, Pa.....	Greville Haslam
Erasmus Hall High School.....	Brooklyn, N. Y.....	J. H. Low



INSTITUTION	LOCATION	HEAD OF INSTITUTION
Ethical Culture School.....	New York City (Central Park West & 63d St.).....	V. T. Thayer
Evander Childs High School....	New York City (Westchester & St. Lawrence Ave.).....	Gilbert S. Blakely
Franklin & Marshall Academy..	Lancaster, Pa.....	E. M. Hartman
Franklin & Marshall College....	Lancaster, Pa.....	Henry Harbaugh Apple, D.D., LL.D.
Franklin School.....	New York City (18-20 W. 89th St.)....	Friedrich Otto Koenig, J. U. D.
Friends' Central High School...	Philadelphia, Pa. (15th & Race Sts.).....	L. Ralston Thomas
Friends' School.....	Baltimore, Md.....	E. C. Wilson
Friends' School.....	Brooklyn, N. Y. (112 Schermerhorn St.)..	Guy W. Chipman
Friends' School.....	Wilmington, Del.....	Charles W. Bush
Friends' Select School.....	Philadelphia, Pa. (140 N. 16th St.).....	Walter W. Haviland
Friends' Seminary.....	New York City (226 E. 16th St.).....	John L. Carver
Gallaudet College.....	Washington, D. C.....	Percival Hall
Garrison Forest School.....	Green Spring Valley, Garrison, Md.....	Mary M. Livingston
Geneva College.....	Beaver Falls, Pa.....	McLeon M. Pearce
George School.....	George School, Pa.....	George A. Walton
Georgetown College.....	Washington, D. C.....	A. J. Donlon
Georgetown College Preparatory School.....	Garret Park, Md.....	Thomas A. Emmet, S. J.
George Washington University..	Washington, D. C.....	William M. Lewis
Georgian Court College.....	Lakewood, N. J.....	Samuel E. Osbourne
Germantown Academy.....	Philadelphia, Pa.....	Stanley R. Yarnall
Germantown Friends' School...	Germantown, Phila....	Leslie Seely
Germantown High School.....	Philadelphia, Pa.....	Charles H. Huber
Gettysburg Academy.....	Gettysburg, Pa.....	W. A. Granville
Gettysburg College.....	Gettysburg, Pa.....	L. Wardlaw Miles
Gilman Country School.....	Roland Park, Md.....	Charlesman A. Herrick
Girard College.....	Philadelphia, Pa.....	W. L. Felter, Ph.D.
Girls' High School.....	Brooklyn, N. Y.....	Jessie E. Allen
Girls' High School.....	Philadelphia, Pa. (17th & Spring Garden Sts.)	William Wesley Guth, Ph.D.
Goucher College.....	Baltimore, Md.....	Weir C. Ketler
Grove City College.....	Grove City, Pa.....	Mrs. Beverly R. Mason
Gunston Hall.....	Washington, D. C. (1906 Florida Ave.)	
Hackley School.....	Tarrytown, N. Y.....	Walter B. Gage
Halstead School.....	Yonkers, N. Y.....	Mary S. Jenkins
Hamilton College.....	Clinton, N. Y.....	Frederick C. Ferry, Ph.D.
Harrisburg Academy.....	Harrisburg, Pa.....	Arthur E. Brown
Haverford College.....	Haverford, Pa.....	William W. Comfort, Ph.D.
Haverford School.....	Haverford, Pa.....	E. M. Wilson
Misses Hebb's School.....	Wilmington, Del.....	Lillie James
Highland Hall.....	Holidaysburg, Pa.....	Ellen C. Keates
Hill School.....	Pottstown, Pa.....	F. Boyd Edwards
Hobart College.....	Geneva, N. Y.....	Murray Bartlett
Holman School for Girls.....	Philadelphia, Pa. (2204 Walnut St.).....	Elizabeth W. Braley
Holton Arms School.....	Washington, D. C. (2125 S St.).....	Mrs. Jessie M. Holton
Hood College.....	Frederick, Md.....	Joseph H. Apple, Ph.D.
Horace Mann School for Boys..	Fieldston, New York City (W. 246th St.)..	Charles C. Tillinghast

INSTITUTION	LOCATION	HEAD OF INSTITUTION
Horace Mann School.....	New York City (120th St. & Broadway)...	Henry C. Pearson
Howard University.....	Washington, D. C.....	Stephen M. Newman
Hunter College of the City of N. Y.....	New York City (Park Ave. & 68th St.)...	George S. Davis, Ph.D.
Irving School.....	Tarrytown, N. Y.....	J. M. Furman
Jacobi School.....	New York City (158 W. 80th St.).....	Mary E. Calhoun
Jamaica High School.....	Jamaica, New York City.....	Charles H. Vosburgh
Johns Hopkins University.....	Baltimore, Md.....	Frank J. Goodnow, LL.D.
Juniata College.....	Huntingdon, Pa.....	I. Harvey Brumbaugh, Ph.D.
Kensington High School for Girls.....	Philadelphia, Pa.....	Beulah Fenimore
Kent Place School.....	Summit, N. J.....	Mrs. Sarah W. Paul & Anna S. Woodman
Keuka College.....	Keuka Park, N. Y.....	A. H. Norton
Kiskiminetas Springs School.....	Saltsburg, Pa.....	A. W. Wilson
Lafayette College.....	Easton, Pa.....	John Henry MacCracken, Ph.D., LL.D.
La Salle College.....	Philadelphia, Pa.....	Brother Richard
Lawrenceville School.....	Lawrenceville, N. J.....	Walter A. Abbott
Lebanon Valley College.....	Annaville, Pa.....	G. D. Gossard, D.D.
Lehigh University.....	S. Bethlehem, Pa.....	C. R. Richards
Liberty High School.....	Bethlehem, Pa.....	James D. Howlett
Lincoln University.....	Lincoln University, Pa.....	William H. Johnson
Linden Hall Seminary.....	Lititz, Pa.....	F. W. Stengel
Lock Haven High School.....	Lock Haven, Pa.....	N. P. Benson
Loyola College.....	Baltimore, Md.....	Joseph A. McEueany, S. J.
Loyola School.....	New York City (65 E. 83rd St.).....	J. Havens Richards, S. J.
McBurney School.....	New York City (318 W. 57th St.).....	Thomas Hemenway
McDonogh School.....	McDonogh, Md.....	W. T. Childs
Mackenzie School.....	Monroe, N. Y.....	Jas. C. Mackenzie, Ph.D.
(Miss) Madeira's School.....	Washington, D. C. (1326 19th St.).....	Mrs. Lucy Madeira Wing
Maher Preparatory School.....	Philadelphia, Pa. (115 S. 34th St.).....	John F. Maher
Manhattan College.....	New York City (3280 Broadway).....	Brother Edward, F. S. C.
Manual Training High School...	Brooklyn, N. Y.....	Horace M. Snyder, Ph.D.
Marquand School.....	Brooklyn, N. Y. (55 Hanson Place).....	Carle O. Warren
Mary Lyon School.....	Swarthmore, Pa.....	Mrs. H. M. Crist
Marywood College.....	Scranton, Pa.....	Mother M. Casimir
(Misses) Masters' School.....	Dobbs Ferry, N. Y.....	Sarah Masters
Mercersburg Academy.....	Mercersburg, Pa.....	William Mann Irvine, Ph.D.
Millersville State Normal School.	Millersville, Pa.....	C. H. Gordinier
Milne High School.....	Albany, N. Y.....	John M. Sayles
Mohegan Lake School.....	Mohegan, N. Y.....	Albert E. Linder
Montclair Academy.....	Montclair, N. J.....	John G. MacVicar
Montclair High School.....	Montclair, N. J.....	H. W. Dutch
Montgomery School.....	Wynnewood, Pa.....	Gibson Bell
Moorestown Friends' School...	Moorestown, N. J.....	W. E. Barrett
Moravian College and Theological Seminary.....	Bethlehem, Pa.....	I. Taylor Hamilton
Moravian Preparatory School...	Bethlehem, Pa.....	R. H. Brennecke
Moravian Seminary and College for Women.....	Bethlehem, Pa.....	J. H. Clewell

INSTITUTION	LOCATION	HEAD OF INSTITUTION
Morris High School.....	New York City (Boston Rd. & 166th St.)	Elmer E. Bogart
Morristown School.....	Morristown, N. J.....	Arthur P. Butler
Mount St. Agnes College.....	Mt. Washington, Md.....	Sister M. Xavier
Mount St. Mary's College.....	Emmitsburg, Md.....	B. J. Bradley
Mount Vernon Seminary.....	Washington, D. C.....	Jean Dean Cole
Muhlenburg College.....	Allentown, Pa.....	John A. W. Haas, D.D., LL.D.
Nazareth Hall Military Academy	Nazareth, Pa.....	A. D. Thaeler
Newark Academy.....	Newark, N. J.....	Wilson Farrand
New Brighton High School.....	New Brighton, Pa.....	Roy W. Wiley
Newman School.....	Lakewood, N. J.....	C. Edmund Delbos
New York Military Academy...	Cornwall-on-Hudson, N. Y.....	Sebastian C. Jones
New York State College for Teachers.....	Albany, N. Y.....	Abraham R. Brubacker
New York University.....	New York City.....	Elmer E. Brown, Ph.D., LL.D.
Nichols School.....	Buffalo, N. Y. (Amherst & Colvin Sts.)	Walter D. Head
Northeast High School for Boys.	Philadelphia, Pa.....	George F. Stradling
Oak Lane Country Day School..	Oak Lane, Pa.....	Francis M. Froelicher
Ogontz School.....	Montgomery Co., Pa.....	Abbey A. Sutherland
Packer Collegiate Institute.....	Brooklyn, N. Y.....	John H. Denbigh, Ph.D.
Park School.....	Baltimore, Md.....	John W. Leydon
Passaic High School.....	Passaic, N. J.....	Arthur D. Arnold
Paterson High School.....	Paterson, N. J.....	Francis R. North
Peddie Institute.....	Hightstown, N. J.....	Roger W. Sweetland
Penn Hall School for Girls.....	Chambersburg, Pa.....	F. T. Magill
Pennington School for Boys....	Pennington, N. J.....	F. H. Green
Pennsylvania College for Women	Pittsburgh, Pa.....	Cora H. Coolidge
Pennsylvania Military College...	Chester, Pa.....	Colonel C. E. Hyatt
Pennsylvania State College.....	State College, Pa.....	
Perkiomen Seminary.....	Pennsburg, Pa.....	O. S. Kriebel
Phila. Normal School.....	Philadelphia, Pa.....	Edwin W. Adams
Pingry School.....	Elizabeth, N. J.....	C. Bertram Newton
Polytechnic Prep. Country Day School.....	Dyker Heights, Brooklyn, N. Y.....	J. D. Allen
Princeton Preparatory School...	Princeton, N. J.....	J. B. Fine
Princeton University.....	Princeton, N. J.....	John G. Hibben, Ph.D.
Putnam Hall.....	Poughkeepsie, N. Y...	Ellen C. Bartlett
Raymond Riordon School.....	Highland, N. Y.....	Earl C. Popp
Ridgefield Park High School...	Ridgefield Park, N. J...	A. Ray Palmer
Roberts-Beach School.....	Catonsville, Md.....	Sarah M. Beach
Russell Sage College.....	Troy, N. Y.....	Eliza Kellas
Rutgers College.....	New Brunswick, N. J...	John M. Thomas, Ph.D.
Rutgers Preparatory School....	New Brunswick, N. J...	William P. Kelly
St. Agatha.....	New York City (553 West End Ave.)....	Emma G. Sebring
St. Agnes' School.....	Albany, N. Y.....	Matilda Gray
St. Alban's.....	Mt. St. Alban, Washington, D. C.....	William H. Church
St. Bonaventure's Seminary & College.....	St. Bonaventure, New York.....	Thomas Plassmann
St. James' School.....	St. James School, Md...	A. H. Onderdonk
St. John Baptist School.....	Ralston, N. J.....	The Sister Superior
St. John's College.....	Annapolis, Md.....	Thomas Fell, LL.D.
St. John's College.....	Brooklyn, N. Y.....	John W. Moore, LL.D.
St. John's College, Fordham University.....	New York City.....	Edward P. Tivnan

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St. John's School.....	Manlius, N. Y.....	William Verbeck
St. Joseph's College.....	Philadelphia, Pa.(18th & Thompson Sts.)..	Albert G. Brown, S. J.
St. Lawrence University.....	Canton, N. Y.....	E. L. Hulett
St. Luke's School.....	Wayne, Pa.....	Charles Henry Strout
St. Mary's Hall.....	Burlington, N. J.....	John Fearnley
St. Mary's School.....	Peekskill, N. Y.....	Sister Mary Antony
St. Paul's School.....	Garden City, L. I.....	Walter R. Marsh
St. Stephen's College.....	Annandale, N. Y.....	B. I. Bell, Ph.D.
St. Thomas College.....	Scranton, Pa. (Wyo- ming Ave.).....	Brother Philip
Scarborough School.....	Scarborough-on-Hud- son, N. Y.....	Morton Snyder
Schuylkill College.....	Reading, Pa.....	Warren F. Teel
Seton Hill College.....	Greensburg, Pa.....	Sister M. Francesca
Shady Side Academy.....	Pittsburgh, Pa. (5035 Castleman St.).....	H. A. Nomer
Shipley School.....	Bryn Mawr, Pa.....	Eleanor O. Brownell
Shippen School.....	Lancaster, Pa.....	Emily R. Underhill
Sidwells Friends' School.....	Washington, D. C. (1809 I St.).....	Thomas W. Sidwell
Skidmore College.....	Saratoga Springs, N.Y.	Charles H. Keyes
Slippery Rock Normal School...	Slippery Rock, Pa....	J. Linwood Eisenberg
S. Phila. High School for Girls..	Philadelphia, Pa.....	Lucy L. W. Wilson, Ph.D.
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Stevens School.....	Germantown, Phila., Pa.....	Katharine M. Denworth
Stevens School.....	Hoboken, N. J. (6th St. & Park Ave.)...	B. F. Carter
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Syracuse University.....	Syracuse, N. Y.....	Jas. Roscoe Day, S.T.D., LL.D.
Technical High School.....	Harrisburg, Pa.....	Charles B. Fager
Temple University.....	Philadelphia, Pa.....	R. H. Conwell
Thiel College.....	Greenville, Pa.....	Carl A. Sundberg
Thurston Preparatory School...	Pittsburgh, Pa.(Shady Ave.).....	Alice M. Thurston
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Trinity School.....	New York City (147 W. 91st St.).....	Lawrence T. Cole, Ph.D., D.D.
Union College.....	Schenectady, N. Y....	Charles Alexander Richmond
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University of the State of New York.....	Albany, N. Y.....	Frank P. Graves, Ph.D.
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Washington College.....	Chestertown, Md.....	Paul E. Titsworth
Waynesburg College.....	Waynesburg, Pa.....	Paul R. Stewart
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Westminster College.....	New Wilmington, Pa....	W. Chas. Wallace, D.D.
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William Penn High School....	Philadelphia, Pa. (15th & Wallace Sts.)....	William F. Gray
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Women's College of Delaware...	Newark, Del.....	Winifred J. Robinson
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Yeates School.....	Lancaster, Pa.....	
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14

